Buffers & Saturating agents

Interchim provides all kinds of buffers and saturating agents for immunoassays. Here is a selection of ready-to-use buffers and remarkable reagents. See Chapter F (Biochemicals section) for other components (i.e. phosphate and other mineral buffers, Tris and other organic buffers, NaCl and other salts, Hepes and other good's buffers).

Technical tip – **What is the best buffer and blocking agent ?**

Buffers :

Phosphate Buffered Saline (PBS) and Tris Buffered Saline (TBS) are the most popular buffers for incubation and washing steps of immunoassays. But for Alkaline Phosphatase systems, phosphate based buffers are avoided and TBS is then preferred while NaCl is omitted for the final substrate incubation. Preservatives such as sodium azide are avoided for peroxidase systems, and citrate phosphate is used for substrate incubation. Tween20 is often added to wash and incubation steps. Now, each technique and each lab may have specific requirements or protocols: many options exists and should be tested for optimal results.

Blocking agents :

Bovine serum albumin (**BSA**) and **dry fat-free milk** are the most popular saturants, and work in many standard techniques with Alk.Phos., HRP or Fluorescence.However they may also contain low level of Igs which reacts with anti-IgG (i.e. bovine , goat, horse, sheep) antibodies. Therefore, they are not recommanded to block or dilute primary antibody of these species as the may significantly increase background and/or reduce secondary antibody efficiency. Many other agents are used, most of time of mammalian (i.e. casein-based), and as such have similar possible undesired background or cross-reactions.
Gelatin is a cheap alternative usually very efficient with chromogenic detections, but is found sometimes not convenient to use (should be melted), having the drawback to mask certains antigens, and not suitable for ECL detections.
Seablock agent is then recommended for critical applications, showing no cross-reactivity with mammalian immunoreagents.
Additionnaly, each saturant can unfortunately hide more or less some antigens, and there is not rule to forcast this! Many factors intervene. Attention should be paid for optimal results when: changing I or II Ab specie, switching to avidin/biotin detector, using different samples types (blood, purified membrane...), changing labels (i.e. from HRP/4CN to HRP/ TMB, or to a fluorescent from a luminescent system).
To conclude, there is no ideal or universal saturant. When your standard agent does not meet expected results (background, unsufficient sensitivity, unspecific bands in blot,...), you should test several agents of different types, and optimize concentration and buffer.

Guide lines for buffers composition	ELISA	Blot	µArray	IHC	FCM	HRP/AP	Biotin	Fluor	Chemil/ HRP
Saturating buffer (post-coating): Choose an inert protein (at 0.5 to 10%) in saline buffer (i.e. 150mM NaCl) in conjunction with a surfactant (0.01 to 1%).	+	+	+	+	N/A	+	+	+	++
Incubation and washing buffer: PBS or TBS with 0.5% of Tween20 is usually sufficient. One tenth dilution with the saturating buffer may be useful especially for incubation buffer.	+	+	+	+	+	+	+	+	++
Guide lines for saturating components									
. BSA, a popular saturating agent except for chemiluminescence. must be avoided in systems containing anti-bovin, goat, horse or sheep II Abs.	+++	++	+	++	+++	+++	+++	+++	-/+
. casein / Milk, also a very popular saturating agent in many detection systems, especially for chemiluminescence. Should be avoided in biotin based assays or in systems containing anti-bovin, goat, horse or sheep II Abs.	++	+/+++ (chem)	+	+	++	+++	-/+	+++	+++
. Gelatin, less largely used (time consuming). Gives excellent results in some detection systems (i.e. AP/BCIP blotting) but merely suits chemiluminescence. Do not suit glass supports. May mask epitopes.	++	++ (Enz)	-/++	-/+	+	+/+++	+/+++	?	-/+
. Normal IgG, useful for blocking certain types of background (i.e. du to cell receptors, rheumatoid or polyreactive antibodies in samples, …	+	+/++ (cell type)	-/+	-/+++ (cell type)	-/+++ (cell type)	+++	+++	+++	+++
. Tween20, an efficient saturant and buffer additive to prevent unspecific binding (c)	+++	+++	+++	+	-	+++	+++	+++	+++
. Other components, i.e. normal sera, fish sera (see seablock) (c)									
. Special, formulated saturants (c)	(a)	(a)	(a)	(a)					

(a) special saturating buffers, optimized by techniques, are proposed in corresponding sections (ELISA, WB, MicroArray, IHC).

(b) IgG (0.1-1%) or serum (1-10%) may be included to washing and incubation buffers. They are useful for detection systems with labeled anti IgG Abs on certains cell types, notably when IgG Fc binding sites (as Ig receptors in cells, cell extracts) generate a high background (IHC and IHF techniques). May increase background and affect double anti Igs labelings. Saturating IgGs and sera should be irrelevant to the capture and detecton ab species . For example, rabbit serum (UP379060) and rabbit IgG (UP378416) for anti mouse detections (no cross-reactivity).

(c) Ask InterBioTech for other ingredients, and formulations. For example other non-ionic surfactants (Tween80, TritonX100,...) have also been used, but may affect cells or even sensitive proteins and protein complexes. PolyethyleneGlycol is a versatile blocker available in a number of sizes, configurations and charges.

Go to Formulated Buffers and saturating agents
Protein-based (SeaBlock, BioBlock,…) | Protein-free saturants | Antibody diluents
Buffers and buffer components
PBS & TBS | Saturating Buffers | Detergents | Albumins | Caseins & milk products | Gelatins [Serum & IgGs | Others

Formulated Buffers for Immunoassays

Protein-based saturating and dilution buffers

■ SeaBlock & AquaBlock, non mammalian saturating agents

- Non-mammalian nature prevents interactions with immunoreagents (i.e. mammalian antibodies)
- Lower background – No unspecifc bands
- Excellent to saturate high binding surfaces, and Glutaraldehyde activated Amine polystyrene (when BSA, casein and other agents are good but not excellent or even poor blockers).

SeaBlock and Aquablock are prepared from fish serum. Although the immune system of fish is similar to other vertebrates, fish antibodies are unlike those of mammals and do not cross-react.

Seablock agent overcomes non-fat milk, BSA, Gelatin, FBS... in most immunoassays, due to high molecular diversity. It is excellent at room temperature and below (as in living fish) to stabilize refrigerated or frozen proteins during immobilization or drying. It suitare optimized for chromogenic and (notably with the optimized formulations) chemiluminescent systems; and for nitrocellulose lateral flow assays.

SeaBlock, standard **UP40301A, 500 ml** **AYPIX0, 500 ml**
Excels as a blocker in ELISA and other solid phase immuno-assays. Technical Sheet (H)
SeaBlock, serum free **UPAP1370 (in PBS), 500 ml** **UPAP1380 (in TBS), 500 ml**
Optimized as a blocker for lateral flow applications. Technical sheet (H)
AquaBlock **UPAM7281, 500ml**
Optimized as a blocker in WB with ECL detection. Technical Sheet (H)

Other available protein-based saturating agents follow:

SuperBlock Blocking Buffers

A protein-based popular blocking buffer for rapid blocking of Western blots and ELISAs –blot in 10min, ELISA plate in 2 min-

SuperBlock Blocking Buffer in PBS **279670, 1L**
SuperBlock T20 PBS Blocking Buffer **RJ2840, 1L**
SuperBlock Blocking Buffer - Blotting in PBS **241540, 1L**
This blocking buffer has been optimized for use with precipitating substrates and yields a high signal-to-noise ratio in most applications.
SuperBlock Blocking Buffer in TBS **668180, 1L**
SuperBlock T20 TBS Blocking Buffer **RJ2850, 1L**
SuperBlock Blocking Buffer - Blotting in TBS **660720, 1L**
This blocking buffer has been optimized for use with precipitating substrates and yields a high signal-to-noise ratio in most applications.
SuperBlock (TBS) Blocking Buffer Dry Blend **L79770, 1L**

StartingBlock (PBS) Blocking Buffer

A versatile, first-intention blocking reagent in every system. Protein-based.

StartingBlock (PBS) Blocking Buffer **FN0470, 1L**
A protein-based blocker formulation in phosphate buffered saline (pH 7.5) for use in Western blotting and ELISA applications.
StartingBlock T20 (PBS) Blocking Buffer **FN0471, 1L**
Formulation includes 0.05% Tween-20 Detergent.
StartingBlock (TBS) Blocking Buffer **FN0480, 1L**
A protein-based blocker formulation in Tris buffered saline (pH 7.5) for use in Western blotting and ELISA applications.
StartingBlock T20 (TBS) Blocking Buffer **FN0482, 1L**
Formulation includes 0.05% Tween-20 Detergent.

Bio-Block Saturating agent

An economic standard blocker for western blotting with chemiluminescence detection.
This blocking buffer contains 0.5 % hannersten casein available in either PBS or TBS, and is optimized for positively charged nylon or PVDF membranes in nucleic acid or protein blotting applications.

BioBlock membrane blocking agent (in PBS) **N1366A, 1 L**
BioBlock membrane blocking agent (in TBS) **N1365A, 1 L**
Technical sheet

Other special protein-based saturants:

Protein Blocker (animal serum free) **FM2165, 100 ml** **FM2166, 500 ml**
Effective for IHC, ELISA, WB – does not contain animal proteins, phosphate (good fo AP detection), nor Azide.

Other formulations are available on inquire.
SeaGrow
Blocking Solution (High Efficiency Blocker) #110050,
SmartBlock, Ready-To-Use Blocker Free of BSA #113125, 125 ml | 250ml | 500ml

Other special saturants – by supports

Super G Protein Preservatives

Super G Blocking Buffer **LO8970-1051100, 100ml**
Optimizes the use of nitrocellulose for protein assays using fluorescence detection. Significantly reduce in fluorescence background while maintaining the high protein-binding capacity of porous nitrocellulose. Purified, protein-free solution has high binding efficiency for rapid and comprehensive clocking of non-specific protein. See section Micro-Arrays

Super G Plus Protein Preservative **105102, 100ml**
Delivers highly efficient blocking of non-specific protein binding on polymer films, with additional components optimized for long-term protein preservation. Designed for MicroArrays, this formulation improves assay performance for various proteins stored for extended periods after immobilization on polymer films. FS. See section MicroArrays.

Protein-free saturating agents

■ Protein-free Blocking Buffers

Eliminate or minimize cross-reactivity associated with protein-based blocking buffers. The need to match species with the secondary antibody is eliminated due to the lack of normal serum in these products. 1X ready-to-use formulations.

RapidBlock™ Solution, 10X **DZ7330, 15ml** **DZ7331, 100ml**
Specially designed for Blotting applications

Protein-Free (TBS) Blocking Buffer **RJ2860-37570, 1L**
Proprietary formulation in Tris-buffered saline at pH 7.4 with Kathon Antimicrobial Agent

Protein-Free T20 (TBS) Blocking Buffer **RJ2870-37571, 1L**
Proprietary formulation in Tris-buffered saline at pH 7.4 with 0.05% Tween-20 and Kathon Antimicrobial Agent

Protein-Free (PBS) Blocking Buffer **RJ2880-37572, 1L**
Proprietary formulation in phosphate buffered saline at pH 7.4 with Kathon Antimicrobial Agent

Protein-Free T20 (PBS) Blocking Buffer **RJ2890-37573, 1L**
Proprietary formulation in phosphate buffered saline at pH 7.4 with 0.05% Tween-20 and Kathon Antimicrobial Agent

Super G Protein Preservatives

Super G Blocking Buffer **LO8970-1051100, 100ml**
Optimizes the use of nitrocellulose for protein assays using fluorescence detection. Significantly reduce in fluorescence background while maintaining the high protein-binding capacity of porous nitrocellulose. Purified, protein-free solution has high binding efficiency for rapid and comprehensive clocking of non-specific protein. See section Micro-Arrays

See also • SeaBlock serum free #UPAP1370
• Components: TBS + Tween20 components
▪ Super G Blocking Buffer #LO8970

Antibody diluents, Preservatives

■ Antibody diluent Solutions

Universal antibody dilution buffer is ready to use for dilution of antibodies in all immunoassays (Immunofluorescence, IHC, ELISA, and WB). This buffer does not contain any mammalian proteins, phosphate, sodium azide or mercury preservative and can be used for dilution of all antibodies, including peroxidase, and antibodies to phosphoproteins. Not suitable for dilution of antibodies to S100 proteins. This buffer contains green food color. This buffer is also availble with BSA (Ig free) as a stabilizer.

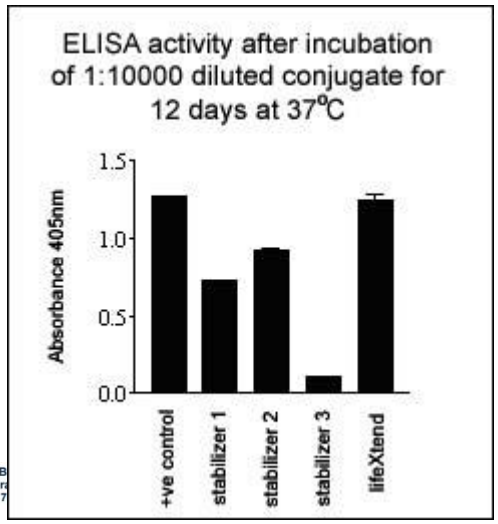
Universal Antibody Dilution Buffer, ready to use	**DU4670, 100 ml**	**DU4671, 250 ml**	**DU4672, 500 ml**
Universal Immuno Buffer 10X	**DU4660, 100 ml**	**DU4661, 1L**	
Antibody Dilution Buffer (with BSA, Immunoglobulin free)	**DU4680, 100 ml**	**DU4681, 250 ml**	**DU4682, 500 ml**

Search online other formulations or ask your specifications. Ex.:
Universal Casein Diluent/Blocker #770627, 250 ml

■ LifeXtend™ HRP conjugate stabilizer/diluant

LifeXtend™ conjugate stabilizer/diluent is a proprietary multi-component reagent system that stabilizes antibody-HRP conjugates, as pre-diluted, ready-to-use reagents, during use and stored both at 4°C and at ambient temperature. This eliminates waste and improving consistency from experiment to experiment.

LifeXtend™ HRP conjugate stabilizer/diluant **YQ7070, 50ml**
LifeXtend™ AP conjugate stabilizer/diluant **YQ7080, 50ml**



Sample additives / diluants

HAMA blocker

This reagent blocks anti-mouse antibodies (wide range of epitopes) in patient samples, and so reduce the frequency of false positive and false negative results in immunoassays.

HAMA blocker **O25570, 20 mg**

*contains purified Mouse IgG validated for anti IgG mouse/human interferences
*tested for all primary IgG isotypes, no contaminating species (bv, hu, rb, rt), nor proteinA, and proteases

RF Blocker

RF (Rheumatoîd factor) blocker **B8IZK0**

The RF (Rheumatoîd factor) blocker contains a blend of anti-RF antibodies to block RF factors in blood samples once added before analysis. It prevent false positive results and give more biorelevant/accurate real positive results.
+
Search more RF products(), including serum/plasma/abs controls, diluent, ELISA kits..

Buffers and saturating components for IA – general use

Following are standard buffers used for Immunoassays (IA) -may be useful also other applications-.

■ Standard Buffers for IA (PBS, TBS)

PBS (Phosphate Buffered Saline) and TBS (Tris Buffered Saline) are surely the mostly used buffers for immunoassays.
See also Biochemical catalog for buffers components and additives (Azide, ...) as powders.

PBS powder pack (for 10L)	**UP68723A, 1 pack**		Technical Sheet
PBS liquid, 20X solution	**N1376A, 500ml**	**N1376B, 1 L**	"
PBS tablets (1 Tab.makes 100-200-500-1000ml of 1X solution)	**30715A, 100 Tabs**@100ml		Technical Sheet
PBS with Tween®, pH 7.5	**N13810, 500 ml**		
TBS powder pack (for 20L)	**UP74004A, 1 pack**		
TBS liquid, 20X solution	**N14580, 4 L**		
TBS tablets (1 Tab.=100 ml of 1X solution)	**GS3660, 100 Tabs**		

•Other buffers are available online () or on inquire, i.e. 10X concentrate PBS (1P7120), D-PBS pH7.4 sterile solutions(GS3574)
See ou Biochemical catalog for individual buffering compound (i.e.
Milk, non fat, powder #768701
Potassium Phosphate Dibasic Anhydrous #687963 | Sodium Bicarbonate ACS Grade #70059A | Sodium Carbonate Anhydrous #141321 | Sodium Chloride #14139E | Sodium DihydrogenoPhosphate #021050(Anhydrous) and 834861(Monohydrate) | Tris Base, UP0316570 | Tween® 20 #UP158743 and UP158740(oxidant free)

Coating buffers and components

•Standard coating buffers (pH 9.6, for proteins)

Coating buffer (for ELISA)	**VD6700, 100 ml , 500ml**
Coating buffer, 10X concentrate	**J0719A, 50 ml**

•Optimized and special coating buffers
Antibodies and antigens coated to polystyrene plates are more or less denatured by the passive coating procedure. In some cases they are even rendered non-functional and non-recognizable, notably in case of plate drying (ex: (strept)avidin in sentiive upon drying and loss its binding capacity – see precoated and stabilized sav-plates in the ELISA catalog, e.g. #UPL76161). For these applications, you might try:

UltraCoat ELISA Plate Coating Buffers help stabilize immobilized proteins to preserve three dimensional structure and functionality. They are designed for optimal coating of antibodies and antigens to polystyrene plates.
ULTRACOAT ELISA PLATE COATING BUFFER, 10X #AJ2570-C100, 100ml-500ml
Contains a physiological based solution of monobasic and dibasic phosphates. TS.(L)
ULTRACOAT ELISA PLATE COATING BUFFER, 5X #XDK410-C1214, 30ml-100ml, 500ml, 1L, 10L
Proprietary composition. TS (L)

COATING BUFFER , PH 7,4 (10X) #120125, 125 ml-500ml-1L

•Other formulations are available online () or on inquire.
See ou Biochemical catalog for individual buffering compound (i.e. Tris #, Phosphate dibasi #, carbonate sodium #, ….

■ Ready to use Standard Blocking Buffers

Blocking solutions are high quality powdered prepackaged blends for use during immunodetection in various techniques, including ELISA and Blotting. They save your time (already weighed out in order each pouch will make one liter of solution) and are high proteomics grade for optimal results.

TBS with Non-Fat Powdered Milk 3%	**GS4160, 5 pk (42 g/1 L)**
TBS with BSA 1%	**GS4170, 5 pk (22 g/1 L)**
PBS with Non-Fat Powdered Milk 3%	**GS4180, 5 pk (39.8 g/1 L)**
PBS with BSA 1%	**GS4190, 5 pk (19.8 g/1 L)**

■ Detergents (Tween 20,...)

Several detergents are used in immunoassays, for their own saturating properties (i.e. Tween®20 may be sufficient to block microplates in ELISAs), but generally rather in conjunction with or secondly to a protein saturating agent. They are added to incubation and washing buffers (about 0.05%) to prevent unspecific binding of probes. Tween®20 is the most popular detergent for this purpose. Tween®80 has been useful for IgM applications. CHAPS, is a gentle detergent that may be useful in critical systems (weak immunologic affinities).
The oxidant free quality improves the stability of enzymatic conjugates during storage and incubations, and also favors more consistent inter-analysis results.

Tween® 20, pure	**15874A, 1 L**

Tween® 20, 20% solution, oxidant free *	**UP158740, 5x10 ml**	**UP158741, 10x10 ml**	
Tween® 80, 20% solution, oxidant free *	**UP158780, 5 x 10 ml**	**UP158781, 10 x 10 ml**	
CHAPS	**UP333514, 5 g**	**UP333515 25 g**	**UP333516, 100 g**
CHAPS, Proteomics grade	**33351K, 5g**	**33351L, 10g**	**33351M, 50g**
TritonX100, 20% solution, oxidant free *	**UP521121, 5x10 ml**	**UP521122, 5x10 ml**	
n-Octyl-b-ThioGlucoside	**UP602080, 1g**	**UP602081, 5g**	

*Highly pure and packaged in sealed ampuls under argon to increase the accuracy of immunoassays.

Albumins

Bovine Serum Albumin (BSA) is a popular saturating agent used to block unspecific binding on microplates, blotting membranes and cell sections. We recommend our standard BSA as a first intention choice for most immunoblocking applications.
NB : please note that BSA does not suit correctly chemiluminescent detection and is not recommended for use with anti-goat or sheep secondary antibodies. (see Technical tip)

BSA standard grade for immunoassays:

BSA powder	**UPQ84170, 100 g**	**UPQ84171, 500 g**	**UPQ84172, 1 kg**

Our standard grade and economic BSA, ubiquitous for most biotechnologies, including immuno-saturations.

BSA 30% solution	**UP900100, 50ml**	**UP900101, 500ml**

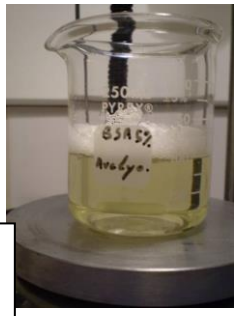
More convenient than powders (no dissolution concerns, no aggregates), and cheaper than ready-to-use blockers
Using this solution, forget the hassle of weighting and dissolving BSA powder (no agregates!). Save time and money!

Technical tip – BSA solution is clearly the better solution!

Forget this
Fastidious weighting
Difficult handling / long dissolution

Detrimental foam
> biomolecules oxidation
Indesirables agregates
> artifacts on blots, background

5-15 min



and adopt Uptima BSA solution !
Pipette the BSA solution directly in your buffer
Dissolution is almost instantaneous

It's ready and clear !

<1 min

Other special grade BSA for demanding or specific applications:

BSA, IgGs and Proteases free	**WU1640, 10g**	**WU1641, 100grams**

For avoiding cross-specific reactions using anti IgG secondary antobodies. See also alternative blockers such as SeaBlock reagent.
Polymerised BSA, 30% solution (Immuno-Hemato grade) **BJ1450, 50ml**
See also our Prionex solution as a BSA alternative to reduce unspecific binding of protein to plastic microplate walls (see "Other saturating agents" paragraph below)

Find other BSA grades and products in the Biochemicals chapter (standard grade #Q84170), and in each related chapter for dedicated grades to culture, proteomics or genomics analysis.

Technical tip - **Caution for use of BSA and dry milk** with anti-goat or anti-sheep secondary antibodies.
BSA and dry milk may contain small amounts of bovine IgG which shar homology with goat and sheep IgG. Anti-goat or sheep secondary antibodies will cross-react with bovine IgG and will significantly increase background. Therefore, the use of BSA or dry milk is not recommended to block or dilute neither these secondary antibodies nor goat and sheep primary antibodies.

See our BSA IgG-free reagent and our SeaBlock, non mammalian blocking agent.

Other albumins: search online

Ovalbumin, from chicken egg white	**R5851A, 1g**	**R5851B, 5g**

MW: 65KD; Ultrapure (>98%) llyophilized powder (M)
Human Albumins (recombinant #BXI150)

Casein (milk) based saturating agents

Milk is an efficient and cheap saturating agent minimize background noise in immunodetection procedures such as Western blotting and immunostaining. Milk can be used to block non-specific binding sites on positively charged nylon or PVDF membranes or used for blocking and dilution of antibodies during immunostaining procedures.
NB : please note milk should be avoided for streptavidin/biotin based separations or assays and is not recommended for use with anti-goat and sheep secondary antibodies. (see Technical tip)

Non-fat Milk **768701, 500 g**
Non-fat Milk, proteomics grade **GS4110, 10X10 g**
Dry Milk Powder **76870A-22012, 4x25g**

Also available:
Clear Milk Blocking Buffer (10X) **37587**
a pre-formulated milk solution, clarified and stabilized for blocking excess nonspecific binding sites, reducing background in western blotting applications and diluting antibodies when used with nitrocellulose and PVDF membranes. It provides lower background, enhanced sensitivity, extended shelf life, and reproducible results compared to standard dry milk.

See also formulated buffer Bio-Block #N1365A

■ Gelatin

An excellent saturating agent for blots with chromogens. May however mask antigens.

Gelatin **N13360, 100 g** **N13361, 500 g**
CAS [9000-70-8]; Bloom number : 240-270 ; pH(28°C) : 4.5-5.5 ; Water (KF) : <12%; Viscosity : 35-45mpa

Fish Gelatin Blocking Agent 10X **CN018A-22010, 100ml**
Fish Gelatin Blocking Agent is a solution of cold water fish skin gelatin that can be added to blocking buffers to minimize non-specific antibody binding in immunodetection procedures such as Western Blotting and immunostaining. Unlike BSA or milk, fish gelatin does not contain IgG or serum proteins that could cross-react with mammalian antibodies.

See also SeaBlock saturating agents.

■ Serum and IgG based saturating agents

Normal -irrelevant- Sera and IgGs

These reagents are prepared from blood of healthy animals. They are typically used as controls or as additives in various immuno-techniques, notably to reduce non-specific detections in IHC and IF techniques.

Applications :

- Saturation of tubes, vials, gels, columns, or filters to prevent non-specific adsorbtion of diluted molecules
- Saturation of IgG binding sites to prevent non-specific adsorbtion of immuno-reagents in FCM, IF and IHC, ELISA.
- Saturation of IgG specific-binding sites for antibody-reagents:
  Ig Fc receptors present on cells or in cell extracts, IgG-cross-reactive antibodies (i.e. Rheumatoid factors)
- Stabilization of reagents
- Protein controls and standards for assays or analysis (i.e. electrophoresis)
- Dilution of blood samples for dosage at constant protein concentration
- Equilibrium studies (free and bound fractions of a drug in serum)
- Co-precipitation: normal IgGs are added to precipitate a diluted monoclonal

Species	Normal Serum	Normal purified IgG
Bovine	UP89243C, 2 ml	
	UP89243A, 10 ml	
	UP89243B, 100 ml	UP757700, 10 mg
Cat	989140, 5 ml	869310, 10 mg
Chicken	UP37908A, 10 ml	773320, 5 mg
Dog	784110, 2 ml	
	784111, 5 ml	M08940, 10 mg
Donkey	UP77719A, 10 ml	866570, 10 mg
Goat	UP379031, 2 ml	
	UP379030, 10 ml	UP767090, 10 mg
GuineaPig U	P37916A, 10 ml	M09850, 10 mg
Hamster (Syrian)	UP28432A, 2 ml	826540, 10 mg
Horse	UP24741A, 10 ml	
	UP24741B, 100 ml	
	UP24741C, 500 ml	766730, 10 mg
Human	UP697906, 10 ml	UP408603, 10 mg
Mouse	UP379120, 2 ml	
	UP379121, 10 ml	UP386670, 5 mg
Rabbit	UP37906B, 5 ml	UP378416, 10 mg
Rat	UP37911A, 2 ml	
	UP37911B, 10 ml	UP443086, 5 mg
Sheep	UP697927, 10 ml	UP797560, 10 mg
Swine	UP379021, 10 ml	
	UP379022, 100 ml	UP062701, 10 mg

- **Normal serum :**
The serum is collected aftr blood coagulation. After addition of 0.09% of sodium azide as preservative, it is filtered using a 0.45µm filter.

- **Normal pure IgG :**
Immunoglobulin from class G (IgG) are highly purified from the serum of non-immunized animals. Uptima's pure IgG are provided in solution at 5mg/ml in PBS buffer with 0.09% sodium azide and filtered using a 0.45µm filter.

See also HAMA blocker #O25580 (avoids false positive and false negative results in immunoassays)

■ Other saturating agents and Buffers components

Prionex

BSA alternative, strongly reduces unspecific binding of protein to plastic microplate walls.

Prionex®, 10% sterile solution **901770, 100 ml**

Go to previous and next sections of the PH catalog:

ImmunoDetection > General Immuno-reagents[PH] > Buffers and saturating agents[PH] (actual section)
Enzymatic Substrates[PH]

ImmunoDetection > General Immuno-reagents[PH] > Buffers and saturating agents[PH] (actual section)
Enzymatic Substrates[PH]