

Species Cross Reactivity – Determined by Immunodiffusion

Each antibody listed has been tested for reactivity to the plasma of a variety of species. The double immunodiffusion (DID) technique used tests the ability of an antibody to precipitate an antigen in an agarose gel. The DID technique has limitations and a negative result should not necessarily be interpreted as non-recognition of an antigen. A number of antibodies may react with fewer recognition sites on the antigen of another species and be unable to form an insoluble immune complex (this is observed with many monoclonal antibodies). An antibody may demonstrate a greater spectrum of cross reactivity in applications such as immunoblotting and immunohistochemistry where antigen precipitation is not required. Below are examples of typical results seen in historical lots. See product insert for lot specific testing results.

Antibodies to:	Prod #	Human	Rat	Mouse	Rabbit	Canine	Feline	Porcine	Bovine
human Fibrinogen	SAFG-IG	***	**	--	**	***	***	*	--
human Fibrinogen fragment E	SAFNE-IG	***	--	--	--	--	--	NT	--
rabbit Fibrinogen	SARFG-IG	***	***	***	***	***	***	NT	--
rat Fibrinogen	SARTF-IG	***	***	***	***	***	***	NT	--
canine Fibrinogen	SACFG-IG	***	***	***	***	***	***	NT	--
human Prothrombin	SAFII-IG	***	--	--	--	*	NT	--	--
human Thrombin	SAHT-IG	***	*	--	--	--	--	--	--
rabbit Thrombin	SART-IG	--	--	--	***	--	--	--	--
bovine Thrombin	SABT-IG	--	--	--	--	--	--	--	***
human Factor V	SAFV-IG	***	--	--	*	--	--	--	--
bovine Factor V	SABFV-IG	--	--	--	--	--	--	--	***
human von Willebrand Factor	GAVWF-IG	***	**	--	**	**	**	**	--
human Factor IX (F.IX)	GAFX-IG	***	--	--	**	--	--	--	--
human Factor X (F.X)	GAFX-IG	***	--	--	--	*	*	--	--
human Factor XI (F.XI)	GAFXI-IG	***	--	--	--	--	--	--	--
human Factor XII (F.XII)	GAFXII-IG	***	--	--	--	--	--	--	--
human Factor XIII (FXIII)	SAFXIII-IG	***	--	--	--	*	*	--	--
human Factor XIII-A (A subunit)	SAF13A-IG	***	**	*	**	--	--	--	--
human Prekallikrein	SAPK-IG	***	**	NT	**	--	--	--	--
human Protein C (PC)	SAPC-IG	***	--	--	--	--	--	--	--
	GAPC-IG	***	--	--	--	--	--	--	--
human Protein S (PS)	SAPS-IG	***	--	--	--	--	--	--	--
	GAPS-IG	***	--	--	--	*	*	--	--
human Plasminogen (Pg)	GAPG-IG	***	**	--	**	**	**	**	*
human Antithrombin (ATIII)	SAAT-IG	***	--	--	--	--	--	--	--
	GAAT-IG	***	**	--	--	**	**	*	--
human Heparin Cofactor-II	GAHC2-IG	***	**	*	**	**	**	**	--
human Protein C Inhibitor (PAI-3)	GAPCI-IG	***	--	--	--	--	--	**	--
Human α_2 Antiplasmin (α_2 AP)	GA2AP-IG	***	--	--	--	--	--	--	--
human TAFI (carboxypeptidase B)	SATAFI-IG	***	--	--	--	--	--	--	--
human α_1 Antitrypsin (α_1 AT)	SA1AT-IG	***	--	--	--	--	--	--	*
	GA1AT-IG	***	--	--	--	**	--	*	--
human α_2 Macroglobulin	GA2M-IG	***	--	--	**	**	***	***	***
human β_2 Glycoprotein-I (Apo-H)	RAB2GP-IG	***	--	--	--	--	*	*	--
	GAB2GP-IG	***	--	--	--	--	--	--	--
rabbit β_2 Glycoprotein-I (Apo-H)	SARBG-IG	*	*	*	***	*	*	--	--
human Vitronectin (S-Protein)	SAVN-IG	***	--	--	--	--	--	--	--
human Complement C1s	GAC1S-IG	***	--	--	--	--	--	--	--
human C1-Inhibitor (C1-Inh)	GACINH-IG	***	--	--	--	--	--	--	--

Legend: *** strong positive * weak positive -- negative NT not tested

Species Cross-Reactivity - Using paired antibodies for EIA

The values given are the reactivities relative to human reference plasma (W.H.O. traceable) when the test plasmas are assayed under the conditions specified in the protocol for each assay. Plasmas with reactivities of less than 1% are listed as negative. Optimization of the assay conditions may be required to efficiently utilize these assays for the measurement of these analytes in animal plasmas. Below are examples of typical results seen in historical lots.

	Analyte	Human	Rat	Mouse	Rabbit	Canine	Feline	Porcine	Bovine
FG-EIA	Fibrinogen antigen	100%	66%	18%	NT	30%	44%	14%	neg
RBFG-EIA	Rabbit Fibrinogen antigen	47%	19%	19%	NT	28%	26%	14%	17%
VWF-EIA	von Willebrand Factor antigen	100%	15%	6%	34%	31%	NT	31%	neg
FII-EIA	Prothrombin antigen	100%	neg	neg	17%	neg	neg	neg	neg
F8C-EIA	Factor VIII antigen	100%	neg	neg	neg	neg	NT	neg	neg
FIX-EIA	Factor IX antigen	100%	neg	neg	14%	1%	NT	neg	neg
FX-EIA	Factor X antigen	100%	neg	1%	neg	1%	NT	neg	neg
PC-EIA	Protein C antigen	100%	neg	neg	neg	neg	neg	neg	neg
PS-EIA	Protein S antigen	100%	neg	neg	2%	neg	2%	neg	neg
ATIII-EIA	Antithrombin antigen	100%	13%	25%	neg	9%	21%	4%	neg
PG-EIA	Plasminogen antigen	100%	4%	5%	11%	33%	NT	NT	3%
TAFI-EIA	Thrombin Activatable Fibrinolysis Inhibitor	100%	3%	7%	neg	neg	NT	5%	neg

Legend: neg=negative NT=not tested

Working concentrations for ELISA, immunoblotting and immunohistochemistry applications.

The optimal concentration of antibody for any particular application will vary depending on the antibody format as well as the detection method used. ABI strongly suggests that each antibody be titrated by the end user to determine the optimal working concentration for each particular application. However, based on our experience we can make some general recommendations regarding antibody concentration ranges that can be used as a starting point in optimizing assay conditions.

The following chart contains *general recommendations only* and may not apply to all our products.

Format	Immunoblotting (ECL detection)	ELISA (capture)	ELISA (detecting)
Whole IgG	5-25 ug/ml	20-50 ug/ml	NA
Affinity-Purified (AP-IgG)	0.5-5 ug/ml	10 ug/ml	NA
IgG Peroxidase (HRP)	5 ug/ml	NA	10 ug/ml
AP-IgG Peroxidase (AP-HRP)	1 ug/ml	NA	2 ug/ml