## A2M Conjugated Antibody

Catalog No: #C49482



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Package Size: #C49482-AF350 100ul #C49482-AF405 100ul #C49482-AF488 100ul

#C49482-AF555 100ul #C49482-AF594 100ul #C49482-AF647 100ul

#C49482-AF680 100ul #C49482-AF750 100ul #C49482-Biotin 100ul

## Description

Product Name	A2M Conjugated Antibody
Host Species	Rabbit
Clonality	Monoclonal
Species Reactivity	Hu
Immunogen Description	recombinant protein
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	A2m antibody A2MG_HUMAN antibody Alpha 2 M antibody Alpha 2M antibody Alpha-2-M antibody
	Alpha-2-macroglobulin antibody C3 and PZP-like alpha-2-macroglobulin domain-containing protein 5 antibody
	CPAMD5 antibody DKFZp779B086 antibody FWP007 antibody S863 7 antibody
Accession No.	Swiss-Prot#:P01023
Uniprot	P01023
GeneID	2;
Excitation Emission	AF350: 346nm/442nm
	AF405: 401nm/421nm
	AF488: 493nm/519nm
	AF555: 555nm/565nm
	AF594: 591nm/614nm
	AF647: 651nm/667nm
	AF680: 679nm/702nm
	AF750: 749nm/775nm
Calculated MW	163 kDa
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## **Application Details**

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250
AF405 conjugated: most applications: 1: 50 - 1: 250
AF488 conjugated: most applications: 1: 50 - 1: 250
AF555 conjugated: most applications: 1: 50 - 1: 250
AF594 conjugated: most applications: 1: 50 - 1: 250
AF647 conjugated: most applications: 1: 50 - 1: 250
AF680 conjugated: most applications: 1: 50 - 1: 250
AF750 conjugated: most applications: 1: 50 - 1: 250

## Background

 $\alpha$ -2-Macroglobulin ( $\alpha$ -2M) is a homotetrameric serum protein consisting of four identical subunits that form dimers through disulfide bonds. Initially,  $\alpha$ -2M was characterized as a pan-proteinase inhibitor that was able to "bait" proteinases into cleaving specific peptide sequences on  $\alpha$ -2M. This interaction induces a conformational change in  $\alpha$ -2M, thus enabling it to "trap" the proteinase and further inhibit its activity. Subsequently,  $\alpha$ -2M has been shown to function as a carrier protein and regulator of cytokines during inflammation. Circulating transforming growth factor  $\beta$  (TGF $\beta$ ) in serum is primarily bound to  $\alpha$ -2M, which renders TGF $\beta$  inactive.  $\alpha$ -2M also binds to IL-6 and, thereby, increases the concentration of IL-6 near lymphocytes, hepatocytes and stem cells involved in mediating the inflammatory cascade. Mutations and deletions in the gene encoding  $\alpha$ -2M are associated with an increased incidence of Alzheimer's Disease (AD), which is consistent with the role of  $\alpha$ -2M in mediating the clearance and degradation of A  $\beta$ , the major component of  $\beta$ -Amyloid deposits accumulated during AD.

Note: This product is for in vitro research use only