

Alpha 2 Macroglobulin, Human Plasma, Fast Form recombinant protein

C3 and PZP-like alpha-2-macroglobulin domain-containing protein 5, A2M, CPAMD5, FWP007 Catalog # PBV10921r

Specification

Alpha 2 Macroglobulin, Human Plasma, Fast Form recombinant protein - Product info

Primary Accession	<u>P01023</u>
Calculated MW	725 kDa (Homotetramer, Subunit size: 180
	kDa) KDa

Alpha 2 Macroglobulin, Human Plasma, Fast Form recombinant protein - Additional Info

Gene ID2Gene SymbolA2MOther NamesC3 and PZP-like alpha-2-macroglobulin domain-containing protein 5, A2M, CPAMD5, FWP007

Gene Source Source Assay&Purity Assay2&Purity2 Recombinant Target/Specificity Alpha 2 Macroglobulin Human Human Plasma SDS-PAGE; ≥95% N/A; No

Application Notes In water or aqueous buffer

Format Lyophilized

Storage -20°C; Lyophilized from 100 mM Na Phosphate, pH 7.2.

Alpha 2 Macroglobulin, Human Plasma, Fast Form recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Alpha 2 Macroglobulin, Human Plasma, Fast Form recombinant protein - Images



Alpha 2 Macroglobulin, Human Plasma, Fast Form recombinant protein - Background

Alpha 2 Macroglobulin (A2M) is a plasma protease inhibitor which has been shown to exist in two forms. The Slow Form of A2M (S-A2M) is the form which possesses the ability to bind and inhibit proteases by a "trap" method. The Fast Form of A2M (F-A2M) is generated when S-A2M undergoes a conformational change due to either entrapment of a protease in the A2M bait region, or chemical cleavage of an internal thiol ester bond located near the bait region. F-A2M does not possess the ability to bind and inhibit protease activity. F-A2M is rapidly taken up by the liver, with a half-life of 2-4 minutes. In vivo, F-A2M typically represents only 0.17–0.7% of the total A2M in blood plasma of adults. The F-A2M plasma concentration is, however, increased in many disease states including pancreatitis, multiple sclerosis and sepsis. F-A2M has also been implicated in the inhibition of amyloid formation associated with Alzheimer's disease and spongiform encephalopathy.

Alpha 2 Macroglobulin, Human Plasma, Fast Form recombinant protein - References

Kan C.-C.,et al.Proc. Natl. Acad. Sci. U.S.A. 82:2282-2286(1985). Lin V.K.,et al.Prostate 63:299-308(2005). Totoki Y.,et al.Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases. Bechtel S.,et al.BMC Genomics 8:399-399(2007). Scherer S.E.,et al.Nature 440:346-351(2006).