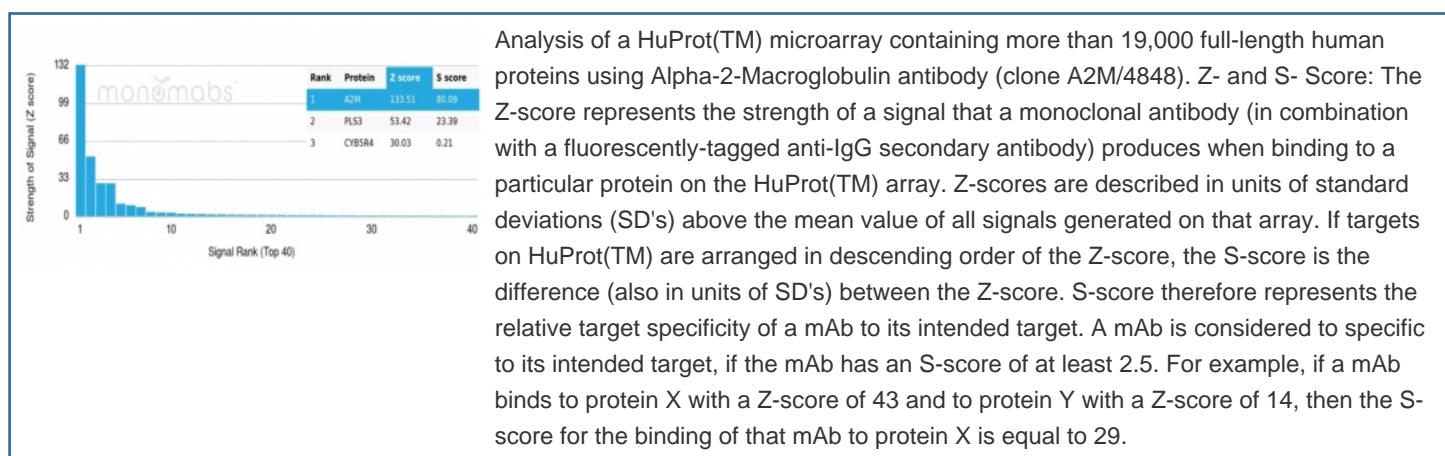


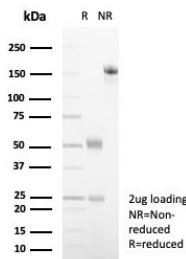
Alpha-2-Macroglobulin Antibody / A2M [clone A2M/4848] (V4249)

Catalog No.	Formulation	Size
V4249-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4249-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4249SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

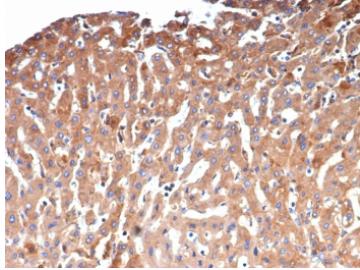
[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG
Clone Name	A2M/4848
Purity	Protein A/G affinity
UniProt	P01023
Localization	Secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This Alpha-2-Macroglobulin antibody is available for research use only.





SDS-PAGE analysis of purified, BSA-free Alpha-2-Macroglobulin antibody (clone A2M/4848) as confirmation of integrity and purity.



IHC staining of FFPE human hepatocellular carcinoma tissue with Alpha-2-Macroglobulin antibody (clone A2M/4848). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

Description

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 (TGFbeta) in serum is primarily bound to Alpha-2M, which renders TGFbeta 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.

Application Notes

Optimal dilution of the Alpha-2-Macroglobulin antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 600-900) from the human protein was used as the immunogen for the Alpha-2-Macroglobulin antibody.

Storage

Aliquot the Alpha-2-Macroglobulin antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.