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Anti-Alpha-1-Antichymotrypsin (SERPINA3) (Histiocytoma Marker) Antibody

Mouse Monoclonal Antibody
Catalog # AH13139

Product Information

Application	WB, IHC-P, IF, FC
Primary Accession	P01011
Other Accession	5342713, 710488
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1 + IgG1
Clone Names	AACT/1451 + AACT/1452
Calculated MW	47651

Additional Information

Gene ID	12
Other Names	SERPINA3; AACT; ACT; Alpha-1-antichymotrypsin; Antichymotrypsin; Cell growth-inhibiting gene 24/25 protein; GIG24; GIG25; Growth inhibiting protein 24; Growth inhibiting protein 25; Serine (or cysteine) proteinase inhibitor clade A member 3; Serine proteinase inhibitor clade A member 3; Serpin A3; Serpin peptidase inhibitor clade A (alpha 1 antiproteinase antitrypsin) member 3
Application Note	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (0.5-1ug/ml); western Blotting (0.5-1.0ug/ml);,Immunohistology (Formalin-fixed) (0.5-1ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-Alpha-1-Antichymotrypsin (SERPINA3) (Histiocytoma Marker) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

SERPINA3

Name	
Synonyms	AACT
Function	Although its physiological function is unclear, it can inhibit neutrophil cathepsin G and mast cell chymase, both of which can convert angiotensin-1 to the active angiotensin-2.
Cellular Location	Secreted.
Tissue Location	Plasma. Synthesized in the liver. Like the related alpha-1-antitrypsin, its concentration increases in the acute phase of inflammation or infection. Found in the amyloid plaques from the hippocampus of Alzheimer disease brains.

Background

It recognizes a protein of 65-76kDa, which is identified antichymotrypsin (AACT). AACT is a plasma protease inhibitor synthesized in the liver as a single glycopeptide chain. In human, the normal serum level of AACT is about one-tenth that of α 1-antitrypsin (AAT), with which it shares nucleic acid and protein sequence homology. Both are major acute phase reactants; their concentrations in plasma increase in response to trauma, surgery and infection. Elevated levels of AACT are widely, but not universally, reported in the cerebrospinal fluid and plasma of AD patients. Prostate-specific antigen (PSA) and its SDS-stable complex with AACT are in widespread use as markers for the diagnosis of prostate cancer. AACT deficiency may also be a possible cause of chronic liver disease. AACT antibody reacts with histiocytes and histiocytic neoplasms. It is widely used to identify histiocytes and tumors derived from them. Acinar tumors of the pancreas and salivary gland may also exhibit AACT positivity.

Images