

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

Mouse Monoclonal Antibody Catalog # AH13137

### **Product Information**

**Application** WB, IHC-P, IF, FC

Primary Accession P01011

Other Accession <u>5342713</u>, <u>710488</u>

Reactivity Human

Host Mouse

Clonality Monoclonal

Isotype Mouse / IgG1

Clone Names 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**

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

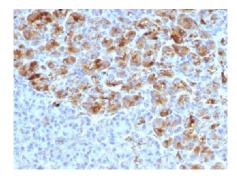
concentration increases in the acute phase of inflammation or infection. Found in the amyloid plaques from the hippocampus of Alzheimer disease

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  $\alpha$  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**



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.