

## Alpha-1-Antichymotrypsin Monoclonal Antibodies

### ORDERING INFORMATION

Catalog No.	Clone No.	MAb Subtype	Size	Library Pack No.	100ug/clone
13801	1AC10-109.5	IgG2a	100ug, 500ug	138101	All 4 clones
13802	1AC10-118.2	IgG1	100ug, 500ug		
13803	1AC10-128.1	IgG1	100ug, 500ug		
13804	1AC10-143.1	IgG2a	100ug, 500ug		
<b>Format:</b>	Protein G-purified antibody in PBS, pH 7.4.				

### BACKGROUND

Alpha 1-antichymotrypsin ( $\alpha$ 1AC) is an alpha globulin glycoprotein produced in the liver that is a member of the serpin superfamily. In humans, it is encoded by the *SERPINA3* gene.  $\alpha$ 1AC inhibits the activity of proteases such as cathepsin G from neutrophils and chymases from mast cells by cleaving them into different conformations. This activity protects tissues, such as the lower respiratory tract, from damage caused by proteolytic enzymes.  $\alpha$ 1AC is an acute phase protein that is induced during inflammation. Deficiency of this protein has been associated with liver disease, and mutations have been identified in patients with Parkinson disease and chronic obstructive pulmonary disease. It is also associated with the pathogenesis of Alzheimer's disease as it enhances the formation of amyloid-fibrils.

### SPECIFICATION SUMMARY

**Antigen:** Purified human serum alpha-1-antichymotrypsin.

**Host Species:** Mouse

**Specificity:** These antibodies specifically recognize human serum alpha-1-antichymotrypsin. They do not cross-react with alpha-1-antitrypsin.

### APPLICATIONS

These antibodies have been qualified for use in ELISA to detect human  $\alpha$ 1AC. Endusers should determine optimal concentrations for their applications.

### DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical to that used in the assay system.

### STORAGE AND STABILITY

These antibodies are stable for at least one (1) year at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$ . Store product in appropriate aliquots to avoid multiple freeze-thaw cycles.

*For in vitro investigational use only. Not intended for use in therapeutic or diagnostic procedures.*