

DESCRIPTION

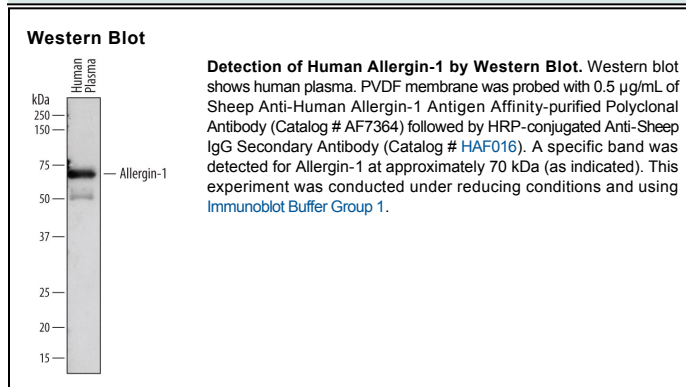
| | |
|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human Allergin-1 in direct ELISAs. |
| Source | Polyclonal Sheep IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | <i>E. coli</i> -derived recombinant human Allergin-1 (isoform Allergin-1S2) Met29-Ser131 Accession # BAJ08253 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|---------------------|---------------------------|-----------|
| Western Blot | 0.5 µg/mL | See Below |

DATA



PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Sterile PBS to a final concentration of 0.2 mg/mL. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

MCA32 (Mast Cell Antigen; also Allergin-1 and c17orf60) is a 70 kDa member of the Ig Superfamily. It is expressed on mast cells, basophils, neutrophils and macrophages, and is reported to negatively regulate allergic mediator release from mast cells. In particular, MCA32 interacts with FcεRI. Upon IgE mediated FcεRI aggregation and activation, MCA32 recruits Tyr phosphatases to a FcεRI tetrameric complex, dampening IgE receptor downstream signaling. Mature human MCA32 is a monomeric type I transmembrane glycoprotein that is 324 amino acids (aa) in length (aa 20-343) (SwissProt #:Q7Z6M3). It contains two C2-type Ig domains (aa 35-118 and 123-217) in the extracellular region (aa 20-227), plus a 95 aa cytoplasmic domain that possesses two ITIM motifs. Two 40 kDa splice variants exist that show deletions of the Ig-like domains. One isoform termed MCA32S1 is missing aa 128-217, while a second isoform called MCA32S2 is missing aa 33-122. This second isoform represents the antigen used for immunization in this product (GenBank #:BAJ08253). Over aa 29-131, the Allergin-1S2 isoform shares 100% sequence identity with human Allergin-1L full length isoform and only 24% aa sequence identity with mouse MCA32.