

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Tryptase ϵ /BSSP-4 in ELISAs.
Source	Monoclonal Rat IgG _{2A} Clone # 246702
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Tryptase ϵ /BSSP-4 Ala33-Ser306 Accession # Q9ER10
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m 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.

Mouse Tryptase ϵ/BSSP-4 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 μ g/mL	Mouse Tryptase ϵ /BSSP-4 Antibody (Catalog # MAB20592)
ELISA Detection	0.5-2.0 μ g/mL	Mouse Tryptase ϵ /BSSP-4 Biotinylated Antibody (Catalog # BAM20591)
Standard		Recombinant Mouse Tryptase ϵ /BSSP-4 (Catalog # 2059-SE)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
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

Tryptase ϵ , brain specific serine protease 4 (BSSP-4) and brain serine protease 2 (BSP-2) are different names given for the same serine protease that is encoded by the PRSS22 gene (1-3). Initially identified having brain-specific expression, mouse Tryptase ϵ is preferentially expressed in epithelium-rich tissues such as the lung and eye, which is similar to its human counterpart (3). The mouse protein is synthesized with a signal peptide (amino acid residues 1 to 32), a pro peptide (residues 33 to 49) and a mature chain (residues 50 to 306) corresponding to the serine protease domain. The full-length protein was expressed and the secreted protein purified. The N-terminal sequencing result indicates that the purified protein corresponds to the pro enzyme. After activation with thermolysin, the enzyme has low activity against peptide substrates tested, but high activity against thioester substrates. The thioester activity is inhibited by 2 mM AEBSF (R&D Systems, Catalog # E1001), a general serine protease inhibitor, and by recombinant human Serpin A5 (R&D Systems, Catalog # 1266-PI).

References:

1. Wong, G.W. *et al.* (2001) *J. Biol. Chem.* **276**:49169.
2. Davies, B.J. *et al.* (1998) *J. Biol. Chem.* **273**:23004.
3. Wong, G.W. *et al.* (2004) *J. Biol. Chem.* **279**:2438.