

# Human Tryptase ε/BSSP-4 Antibody

Monoclonal Mouse IgG<sub>2A</sub> Clone # 725445

Catalog Number: MAB5047

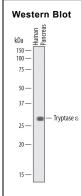
DESCRIPTION		
Species Reactivity	Human	
Specificity	Detects human Tryptase ε/BSSP-4 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant mouse Tryptase ε/BSSP-4 is observed.	
Source	Monoclonal Mouse IgG <sub>2A</sub> Clone # 725445	
Purification	Protein A or G purified from hybridoma culture supernatant	
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Tryptase ε/BSSP-4 Ala33-Ser317 Accession # Q9GZN4	
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.

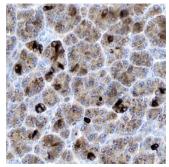
	Recommended Concentration	Sample
Western Blot	2 μg/mL	See Below
Immunohistochemistry	8-25 μg/mL	See Below

#### DATA



Detection of Human Tryptase ε/BSSP-4 by Western Blot. Western blot shows lysates of human pancreas tissue. PVDF membrane was probed with 2 μg/mL of Mouse Anti-Human Tryptase ε/BSSP-4 Monoclonal Antibody (Catalog # MAB5047) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Tryptase ε/BSSP-4 at approximately 34 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

## Immunohistochemistry



Tryptase ε/BSSP-4 in Human Pancreas. Tryptase ε/BSSP-4 was detected in immersion fixed paraffin-embedded sections of human pancreas using Mouse Anti-Human Tryptase ε/BSSP-4 Monoclonal Antibody (Catalog # MAB5047) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heatinduced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in exocrine cells. View our protocol for Chromogenic IHC Staining of Paraffinembedded Tissue Sections.

Reconstitution
Shipping
Stability & Storage

## BACKGROUND

Tryptase  $\varepsilon$ , also known as brain-specific protease-4 (BSSP-4) and prosemin, is expressed in the brain and epithelium-rich tissues such as the lung and eye (1, 2). BSSP-4 is a serine protease related to trypsin, preferentially hydrolyzing substrates after arginine and lysine residues. However, Tryptase  $\varepsilon$  is less susceptible to inhibition by common trypsin inhibitors such as aprotinin,  $\alpha$ 1-antitrypsin and secretory leukocyte protease inhibitor (3). Tryptase  $\varepsilon$  efficiently converts pro-urokinase-type plasminogen activator to its mature, active form (3).

# References:

- 1. Wong, G.W. et al. (2004) J. Biol. Chem. 279:2438.
- 2. Wong, G.W. et al. (2001) J. Biol. Chem. 276:49169.
- 3. Yasuda, S. et al. (2005) Blood 105:3893.

