

# Tryptase $\epsilon$ (P-15): sc-107313

## BACKGROUND

Tryptase  $\epsilon$ , also known as brain-specific serine protease 4 (BSSP-4) or serine protease 22, is a member of the human 16p13.3 family of serine proteases. It is expressed in a developmentally regulated manner in esophagus, trachea and lung. Tryptase  $\epsilon$  is a major product of the normal pulmonary epithelial cells. It is secreted as an active enzyme and, unlike other family members, Tryptase  $\epsilon$  can autoactivate. Tryptase  $\epsilon$ , once activated, cannot effectively be inhibited by the protease inhibitors that are found in normal plasma. It is a potent activator of uPA (urokinase-type plasminogen activator precursor), a serine protease that is responsible for cleaving plasminogen. Tryptase  $\epsilon$  converts uPA into its mature, enzymatically active form and therefore plays an important role in fibrinolysis, connective tissue remodeling and innate immunity.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PRSS22 (human) mapping to 16p13.3; Prss22 (mouse) mapping to 17 A3.3.

## SOURCE

Tryptase  $\epsilon$  (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Tryptase  $\epsilon$  of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-107313 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Tryptase  $\epsilon$  (P-15) is recommended for detection of Tryptase  $\epsilon$  of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with family member Tryptase  $\gamma$ .

Tryptase  $\epsilon$  (P-15) is also recommended for detection of Tryptase  $\epsilon$  in additional species, including equine, canine and porcine.

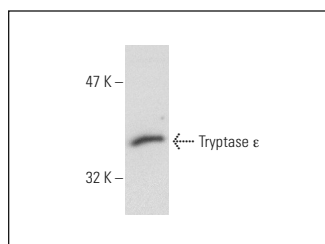
Suitable for use as control antibody for Tryptase  $\epsilon$  siRNA (h): sc-93094, Tryptase  $\epsilon$  siRNA (m): sc-108026, Tryptase  $\epsilon$  shRNA Plasmid (h): sc-93094-SH, Tryptase  $\epsilon$  shRNA Plasmid (m): sc-108026-SH, Tryptase  $\epsilon$  shRNA (h) Lentiviral Particles: sc-93094-V and Tryptase  $\epsilon$  shRNA (m) Lentiviral Particles: sc-108026-V.

Molecular Weight of Tryptase  $\epsilon$  zymogen: 36 kDa.

Molecular Weight of Tryptase  $\epsilon$  active form: 31 kDa.

Positive Controls: TT whole cell lysate: sc-364195.

## DATA



Tryptase  $\epsilon$  (P-15): sc-107313. Western blot analysis of Tryptase  $\epsilon$  expression in Mv 1 Lu whole cell lysate.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.