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## Neutrophil Elastase Rabbit pAb

Catalog Number: bs-6982R

Target Protein: Neutrophil Elastase

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: Flow-Cyt (1µg/Test)

Reactivity: Human (predicted:Mouse, Rat, Dog)

Predicted MW: 26 kDa

Entrez Gene: 1991

Swiss Prot: P08246

Source: KLH conjugated synthetic peptide derived from human Neutrophil Elastase/ELANE: 101-200/267.

Purification: affinity purified by Protein A

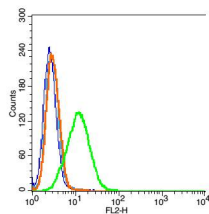
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

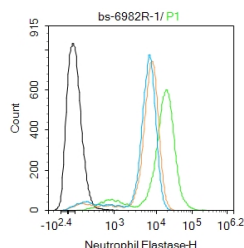
**Background:** Elastases form a subfamily of serine proteases that hydrolyze many proteins in addition to elastin. Humans have six elastase genes which encode the structurally similar proteins. The product of this gene hydrolyzes proteins within specialized neutrophil lysosomes, called azurophil granules, as well as proteins of the extracellular matrix following the protein's release from activated neutrophils. The enzyme may play a role in degenerative and inflammatory diseases by its proteolysis of collagen-IV and elastin of the extracellular matrix. This protein degrades the outer membrane protein A (OmpA) of E. coli as well as the virulence factors of such bacteria as Shigella, Salmonella and Yersinia. Mutations in this gene are associated with cyclic neutropenia and severe congenital neutropenia (SCN). This gene is clustered with other serine protease gene family members, azurocidin 1 and proteinase 3 genes, at chromosome 19pter. All 3 genes are expressed coordinately and their protein products are packaged together into azurophil granules during neutrophil differentiation. [provided by RefSeq, May 2009].

### VALIDATION IMAGES

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Blank control: A549(blue), the cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice.. Isotype Control Antibody: Rabbit IgG(orange) ; Secondary Antibody: Goat anti-rabbit IgG-FITC(white blue), Dilution: 1:100 in 1 X PBS containing 0.5% BSA ; Primary Antibody Dilution: 1µl in 100 µL1X PBS containing 0.5% BSA(green).



Blank control: THP-1. Primary Antibody (green line): Rabbit Anti-Neutrophil Elastase antibody (bs-6982R) Dilution: 1µg /10<sup>6</sup> cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-FITC Dilution: 0.5µg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

## PRODUCT SPECIFIC PUBLICATIONS

[IF=64.8] Wu Jingjing. et al. Adhesive anti-fibrotic interfaces on diverse organs. NATURE. 2024 May;:1-8 IF ; Rat,Mouse,Pig . 38778109

[IF=25.5] James L. Ross. et al. Microglia and monocyte-derived macrophages drive progression of pediatric high-grade gliomas and are transcriptionally shaped by histone mutations. IMMUNITY. 2024 Oct 11 IHC ; Human,Mouse . 39395421

[IF=20.479] Andrew R. Sas. et al. A new neutrophil subset promotes CNS neuron survival and axon regeneration. Nat Immunol. 2020 Oct;21(12):1496-1505 FCM ; Mouse . 33106668

[IF=17.694] Chen Zhihong. et al. Monocyte depletion enhances neutrophil influx and proneural to mesenchymal transition in glioblastoma. NAT COMMUN. 2023 Apr;14(1):1-24 IHC,IF ; Mouse,Human . 37012245

[IF=16.036] Abbas Jarrahi. et al. rhDNase Improves Acute Respiratory Distress Syndrome Via Neutrophil Extracellular Trap Degradation. J THROMB HAEMOST. 2023 May;: FCM ; Mouse . 37196848