

# **Rabbit Anti-EPX antibody**

# SL3881R

Product Name:	EPX
Chinese Name:	嗜酸性粒细胞过氧化物酶抗体
Alias:	Eosinophil peroxidase; Eosinophil peroxidase heavy chain; EPER; EPO; EPP; EPX PEN; PERE; PERE_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	79kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Eosinophil peroxidase heavy chain:601-715/715
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	EPX, eosinophil peroxidase, is an antimycobacterial protein that localizes to cytoplasmic granules of eosinophils and recruits bromide to generate a halogenating oxidant. EPX dependent generation of hypobromous acid causes damage to tissue during inflammatory conditions that include asthma, allergies, cancer and parasitic/helminthic infections. EPX is a major enzyme present in eosinophils and upon degranulation, becomes released into

the airways of asthmatics. As a result of its cationic nature and its ability to catalyze the formation of highly toxic oxidants, EPX can induce lung injury in a JNK dependent manner.

## **Function:**

Mediates tyrosine nitration of secondary granule proteins in mature resting eosinophils. Shows significant inhibitory activity towards Mycobacterium tuberculosis H37Rv by inducing bacterial fragmentation and lysis.

## **Subunit:**

Tetramer of two light chains and two heavy chains.

#### **Subcellular Location:**

Cytoplasmic granule. Note=Cytoplasmic granules of eosinophils.

## **DISEASE:**

Defects in EPX are the cause of eosinophil peroxidase deficiency (EPD) [MIM:261500]. EPD is an autosomal recessive defect where anomalous eosinophils are characterized by nuclear hypersegmentation, hypogranulation, and negative peroxidase and phospholipid staining.

# Similarity:

Belongs to the peroxidase family. XPO subfamily.

# **SWISS:**

P11678

# Gene ID:

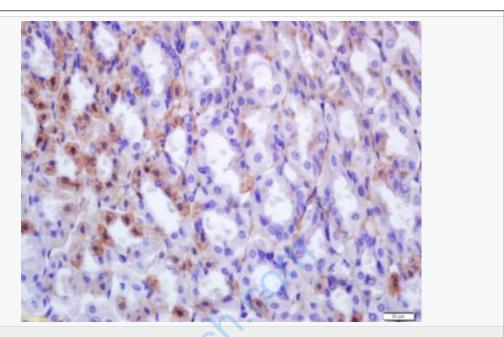
8288

# Database links:

UniProtKB/Swiss-Prot: P11678.2

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Tissue/cell: mouse stomach tissue; 4% Paraformaldehyde-fixed and paraffinembedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-EPX Polyclonal Antibody, Unconjugated(SL3881R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining