Data Sheet (Cat.No.TMAB-11806)

TargetMol

Anti-Protective protein/Cathepsin A Polyclonal Antibody

Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse,Rat (predicted:Dog,Pig,Cow,Horse)
Molecular Weight:	Theoretical: 51 kDa. Actual: 52 kDa.
Purification:	Protein A purified

Applications

Verified Activity:	1. Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Protective protein, Cathepsin A) Polyclonal Antibody, Unconjugated (TMAB-11806) at 1:400 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining. 2. 25 µg total protein per lane of various lysates (see on figure) probed with Protective protein/Cathepsin A polyclonal antibody, unconjugated (TMAB-11806) at 1:500 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r. T. for 60 min.
Application:	WB,IHC-P,IHC-Fr,IF
Recommended	WB: 1:500-2000; IHC-P: 1:100-500; IHC-Fr: 1:100-500; IF: 1:100-500

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthetic peptide: human Protective protein
Antigen Species:	Human
Gene ID:	5476
Uniprot ID:	P10619

Research Background

Lysosomal protective protein/cathepsin A (PPCA) is a lysosomal serine carboxypeptidase that forms an intralysosomal enzyme complex with ?galactosidase and neuraminidase (NEU1). PPCA is synthesized as a 54 kDa precursor/zymogen, and proteolytically cleaved in the lysosome into a catalytically active 32 and 20 kDa two chain enzyme. The enzyme has cathepsin A activity at acidic pH but maintains also a deamidase/esterase activity at neutral pH. Furthermore, the human enzyme, purified from platelets and lymphocytes, has been shown to function on the inactivation of selected neuropeptides, like substance P, oxytocin, and endothelin I. The autosomal recessive genetic deficiency of PPCA causes galactosialidosis, a neurodegenerative lysosomal storage disorder, resulting in the secondary deficiencies of ?galactosidase and NEU1.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481