

ENTPD5 / CD39L4 Antibody
Rabbit Polyclonal Antibody
Catalog # ALS15707**Specification**

ENTPD5 / CD39L4 Antibody - Product Information

Application	IHC, WB
Primary Accession	O75356
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	48kDa KDa

ENTPD5 / CD39L4 Antibody - Additional Information**Gene ID** 957**Other Names**

Ectonucleoside triphosphate diphosphohydrolase 5, NTPDase 5, 3.6.1.6, CD39 antigen-like 4, ER-UDPase, Guanosine-diphosphatase ENTPD5, GDPase ENTPD5, 3.6.1.42, Nucleoside diphosphatase, Uridine-diphosphatase ENTPD5, UDPase ENTPD5, ENTPD5, CD39L4, PCPH

Target/Specificity

Human ENTPD5. Predicted cross-reactivity based on amino acid sequence homology: mouse (88%), rat (86%).

Reconstitution & Storage

Aliquot and store at -20°C. Minimize freezing and thawing.

Precautions

ENTPD5 / CD39L4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ENTPD5 / CD39L4 Antibody - Protein Information**Name** ENTPD5 ([HGNC:3367](#))**Function**

Hydrolyzes nucleoside diphosphates with a preference for GDP, IDP and UDP compared to ADP and CDP (PubMed: 15698960, PubMed: 10400613). In the lumen of the endoplasmic reticulum, hydrolyzes UDP that acts as an end-product feedback inhibitor of the UDP-Glc:glycoprotein glucosyltransferases. UMP can be transported back by an UDP-sugar antiporter to the cytosol where it is consumed to regenerate UDP- glucose. Therefore, it positively regulates protein reglucosylation by clearing UDP from the ER lumen and by promoting the regeneration of UDP-glucose. Protein reglucosylation is essential to proper glycoprotein folding and quality control in the ER (By similarity).

Cellular Location

Endoplasmic reticulum {ECO:0000250|UniProtKB:Q9WUZ9}. Secreted

Tissue Location

Expressed in adult liver, kidney, prostate, testis and colon. Much weaker expression in other tissues

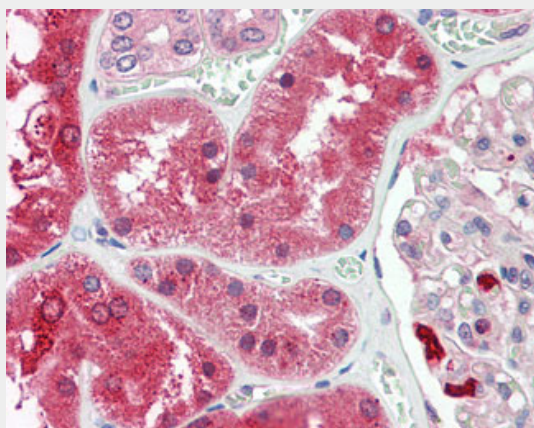
Volume

50 µl

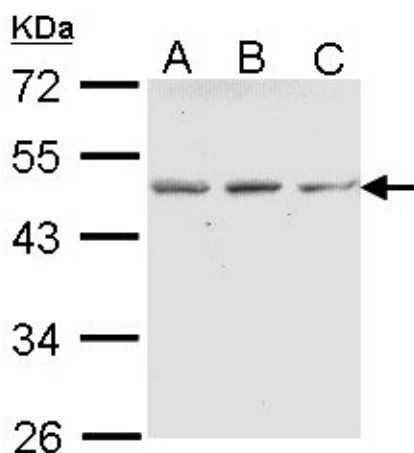
ENTPD5 / CD39L4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ENTPD5 / CD39L4 Antibody - Images

Anti-ENTPD5 / CD39L4 antibody IHC staining of human kidney.



Sample (30 ug of whole cell lysate).

ENTPD5 / CD39L4 Antibody - Background

Uridine diphosphatase (UDPase) that promotes protein N- glycosylation and ATP level regulation. UDP hydrolysis promotes protein N-glycosylation and folding in the endoplasmic reticulum, as well as elevated ATP consumption in the cytosol via an ATP hydrolysis cycle. Together with CMPK1 and AK1, constitutes an ATP hydrolysis cycle that converts ATP to AMP and results in a compensatory increase in aerobic glycolysis. The nucleotide hydrolyzing preference is GDP > IDP > UDP, but not any other nucleoside di-, mono- or triphosphates, nor thiamine pyrophosphate. Plays a key role in the AKT1-PTEN signaling pathway by promoting glycolysis in proliferating cells in response to phosphoinositide 3-kinase (PI3K) signaling.

ENTPD5 / CD39L4 Antibody - References

- Chadwick B.P.,et al.Genomics 50:357-367(1998).
- Recio J.A.,et al.Mol. Carcinog. 27:229-236(2000).
- Murphy-Piedmonte D.M.,et al.Biochim. Biophys. Acta 1747:251-259(2005).
- Heilig R.,et al.Nature 421:601-607(2003).
- Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.