For Research Use Only

IDUA Recombinant monoclonal antibody, PBS Only (Capture)

Catalog Number:86499-1-PBS

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Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
86499-1-PBS

Size:
100ug , Concentration: 1 mg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG30658

GenBank Accession Number:
NM_000203

GeneID (NCBI):
3425

UNIPROT ID:
P35475

Full Name:
iduronidase, alpha-L-

Calculated MW:
73 kDa

Observed MW:
73-75 kDa

Purification Method:
Protein A purification

CloneNo.:
251274F3

Applications

Tested Applications:
WB, Sandwich ELISA, Indirect ELISA

Species Specificity:
human, mouse, rat

Product Information

86499-1-PBS targets IDUA as part of a matched antibody pair:

MP02673-1: 86499-1-PBS capture and 86499-2-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications.Antibody use should be optimized by the end user for each application and assay.

Background Information

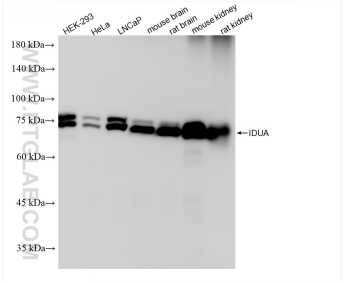
Iduronidase (L-iduronidase, alpha-L-iduronidase, laronidase) is an enzyme with the systematic name glycosaminoglycan alpha-L-iduronohydrolase. This enzyme catalyzes the hydrolysis of unsulfated alpha-L-iduronosidic linkages in dermatan sulfate. It is a glycoprotein enzyme found in the lysosomes of cells. It is involved in the degeneration of glycosaminoglycans such as dermatan sulfate and heparan sulfate. The enzyme acts by hydrolyzing the terminal alpha-L-iduronic acid residues of these molecules, degrading them (PMID: 4993544,30407). A deficiency in the IDUA protein is associated with mucopolysaccharidoses (MPS). MPS, a type of lysosomal storage disease, is typed I through VII. In this syndrome, glycosaminoglycans accumulate in the lysosomes and cause substantial disease in many different tissues of the body. IDUA mutations result in the MPS 1 phenotype, which is inherited in an autosomal recessive fashion. The defective alpha-L-iduronidase results in an accumulation of heparan and dermatan sulfate within phagocytes, endothelium, smooth muscle cells, neurons, and fibroblasts. Prenatal diagnosis of this enzyme deficiency is possible (PMID:8242073).

Storage

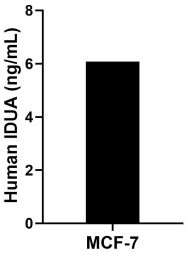
Storage:
Store at -80°C.
Storage Buffer:
PBS only, pH7.3

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

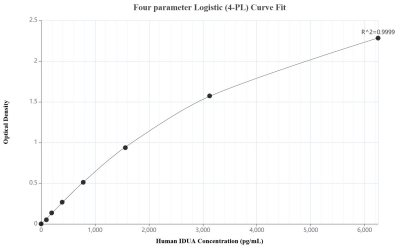
Selected Validation Data



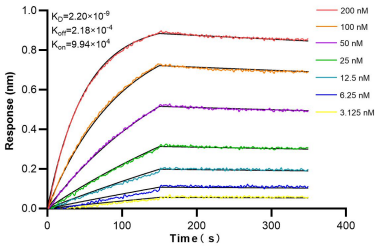
Various lysates were subjected to SDS PAGE followed by western blot with 86499-1-RR (IDUA antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86499-1-PBS in a different storage buffer formulation.



The mean IDUA concentration was determined to be 6.07 ng/mL in MCF-7 cell extract based on a 1.20 mg/mL extract load.



Sandwich ELISA standard curve of MP02673-1, Human IDUA Recombinant Matched Antibody Pair - PBS only. 86499-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag30658. 86499-2-PBS was HRP conjugated as the detection antibody. Range: 97.7-6250 pg/mL.



Biolayer interferometry (BLI) kinetic assays of 86499-1-RR against Human IDUA were performed. The affinity constant is 2.20 nM.