

Anti-HYAL3 Antibody
Catalog # ABO11165

Specification

Anti-HYAL3 Antibody - Product Information

Application	WB, IHC
Primary Accession	O43820
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Hyaluronidase-3(HYAL3) detection. Tested with WB, IHC-P in Human;Mouse.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-HYAL3 Antibody - Additional Information

Gene ID 8372

Other Names

Hyaluronidase-3, Hyal-3, 3.2.1.35, Hyaluronoglucosaminidase-3, Lung carcinoma protein 3, LuCa-3, HYAL3, LUCA3

Calculated MW

46501 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse

Subcellular Localization

Secreted . Lysosome .

Tissue Specificity

Bone marrow, testis and kidney. Isoform 4 is detected in all bladder tumor and prostate tumor cells. .

Protein Name

Hyaluronidase-3(Hyal-3)

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human HYAL3(357-371aa SHQRCHGHGRCARRD), different from the related rat sequence by three amino acids, and different

from the related mouse sequence by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the glycosyl hydrolase 56 family.

Anti-HYAL3 Antibody - Protein Information

Name HYAL3

Synonyms LUCA3

Function

Facilitates sperm penetration into the layer of cumulus cells surrounding the egg by digesting hyaluronic acid. Involved in induction of the acrosome reaction in the sperm. Involved in follicular atresia, the breakdown of immature ovarian follicles that are not selected to ovulate. Induces ovarian granulosa cell apoptosis, possibly via apoptotic signaling pathway involving CASP8 and CASP3 activation, and poly(ADP-ribose) polymerase (PARP) cleavage. Has no hyaluronidase activity in embryonic fibroblasts in vitro. Has no hyaluronidase activity in granulosa cells in vitro.

Cellular Location

Secreted {ECO:0000250|UniProtKB:Q8VEI3}. Cell membrane {ECO:0000250|UniProtKB:Q8VEI3}. Cytoplasmic vesicle, secretory vesicle, acrosome {ECO:0000250|UniProtKB:Q8VEI3}. Endoplasmic reticulum {ECO:0000250|UniProtKB:Q8VEI3}. Early endosome {ECO:0000250|UniProtKB:Q8VEI3}. Note=Mostly present in low-density vesicles. Low levels in higher density vesicles of late endosomes and lysosomes. Localized in punctate cytoplasmic vesicles and in perinuclear structures, but does not colocalize with LAMP1. Localized on the plasma membrane over the acrosome and on the surface of the midpiece of the sperm tail. {ECO:0000250|UniProtKB:Q8VEI3}

Tissue Location

Expressed in sperm (PubMed:20586096). Highly expressed in epidermis of the skin, where it is expressed intracellularly in the deep horny layer (at protein level) (PubMed:21699545). Bone marrow, testis and kidney (PubMed:10493834)

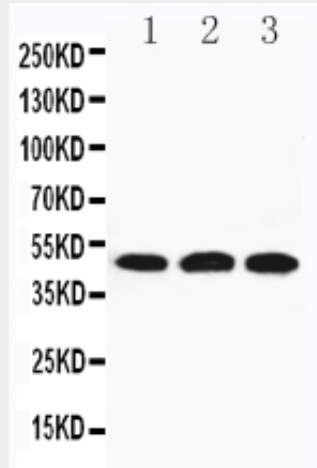
Anti-HYAL3 Antibody - Protocols

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

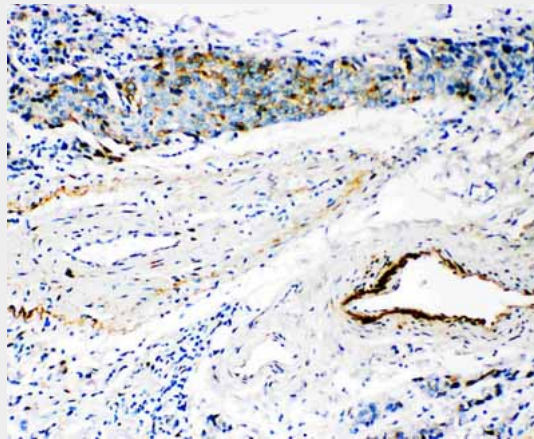
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-HYAL3 Antibody - Images



Anti-HYAL3 antibody, ABO11165, Western blotting Lane 1: 22RV Cell Lysate Lane 2: HELA Cell Lysate Lane 3: V20S Cell Lysate



Anti-HYAL3 antibody, ABO11165, IHC(P) IHC(P): Human Mammary Cancer Tissue

Anti-HYAL3 Antibody - Background

HYAL3 (hyaluronoglucosaminidase 3) is an enzyme that in humans is encoded by the HYAL3 gene, also known as LUCA3, Hyaluronidase-3, Lung carcinoma protein 3, LUCA-3, LUCA14, Minna14. By Northern blot analysis, expression of a 2.1-kb HYAL3 transcript that was strongest in testis and bone marrow, but relatively weak in other organs. HYAL3 encodes a predicted 417-amino acid protein. This gene encodes a protein which is similar in structure to hyaluronidases. Hyaluronidases intracellularly degrade hyaluronan, one of the major glycosaminoglycans of the extracellular matrix. Hyaluronan is thought to be involved in cell proliferation, migration and differentiation. However, this protein has not yet been shown to have hyaluronidase activity. The gene is one of several related genes in a region of chromosome 3p21.3 associated with tumor suppression.