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Anti-HYAL3 Antibody

Catalog # ABO11165

Product Information

Application	WB, IHC-P
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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, By Heat Western blot, 0.1-0.5 □g/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. .
Source	Eukaryota
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 r˚Constitution, 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.

Protein Information

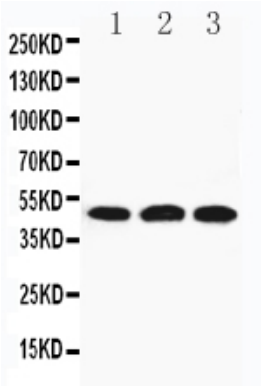
Name	HYAL3
Synonyms	LUCA3
Function	Facilitates sperm penetration into the layer of cumulus cells surrounding the egg by digesting hyaluronic acid. Involved in induction of the acrosome reaction in the sperm. Involved in follicular atresia, the breakdown of immature ovarian follicles that are not selected 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 intracellularily in the deep horny layer (at protein level) (PubMed:21699545). Bone marrow, testis and kidney (PubMed:10493834)

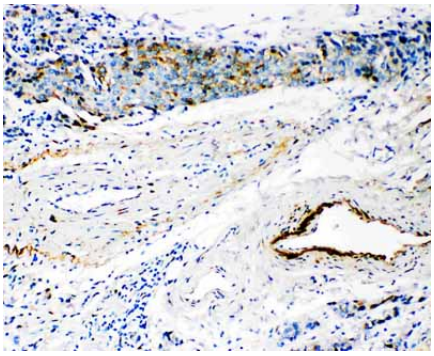
Background

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 though 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.

Images

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





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