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HCAM Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10288

Specification

HCAM Antibody - Product Information

Application	**WB, IHC, IP**
Primary Accession	P16070
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**81538**

HCAM Antibody - Additional Information

Gene ID 960

Application & Usage	**Western blotting (0.5-4 µg/ml), immunoprecipitation (20 µg/ml) and and Immunohistochemistry (5 µg/ml). However, the optimal concentrations should be determined individually.**

Other Names
CD44 , homing cell adhesion molecule, cell adhesion molecule

Target/Specificity
HCAM

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
100 µg (0.2 mg/ml) protein A purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 50% glycerol, 1% BSA, and 0.02% thimerosal.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
HCAM Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

HCAM Antibody - Protein Information

Name CD44

Synonyms LHR, MDU2, MDU3, MIC4

Function
Cell-surface receptor that plays a role in cell-cell interactions, cell adhesion and migration, helping them to sense and respond to changes in the tissue microenvironment (PubMed:16541107, PubMed:19703720, PubMed:22726066). Participates thereby in a wide variety of cellular functions including the activation, recirculation and homing of T-lymphocytes, hematopoiesis, inflammation and response to bacterial infection (PubMed:7528188). Engages, through its ectodomain, extracellular matrix components such as hyaluronan/HA, collagen, growth factors, cytokines or proteases and serves as a platform for signal transduction by assembling, via its cytoplasmic domain, protein complexes containing receptor kinases and membrane proteases (PubMed:18757307, PubMed:23589287). Such effectors include PKN2, the RhoGTPases RAC1 and RHOA, Rho-kinases and phospholipase C that coordinate signaling pathways promoting calcium mobilization and actin-mediated cytoskeleton reorganization essential for cell migration and adhesion (PubMed:15123640).

Cellular Location
Cell membrane; Single-pass type I membrane protein. Cell projection, microvillus {ECO:0000250|UniProtKB:P15379}. Secreted Note=Colocalizes with actin in membrane protrusions at wounding edges Co-localizes with RDX, EZR and MSN in microvilli. Localizes to cholesterol-rich membrane-bound lipid raft domains {ECO:0000250|UniProtKB:P15379, ECO:0000269|PubMed:23589287}

Tissue Location
Detected in fibroblasts and urine (at protein level) (PubMed:25326458, PubMed:36213313, PubMed:37453717). Detected in placenta (at protein level) (PubMed:32337544). Isoform 10 (epithelial isoform) is expressed by cells of epithelium and highly expressed by carcinomas. Expression is repressed in neuroblastoma cells

HCAM 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 Cytomety
- Cell Culture

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HCAM Antibody - Images

HCAM Antibody - Background

Cell adhesion molecules (CAMs) are a family of closely related cell surface glycoproteins involved in cell-cell interactions during growth and are tho µght to play an important role in embryogenesis and development. The CAM family includes NCAM (neuronal cell adhesion molecule), ICAM (intracellular adhesion molecule), PECAM (platelet/endothelial cell adhesion molecule), BLCAM (produced by alternative splicing of the CD22 gene), VCAM (vascular cell adhesion molecule), and HCAM (homing cell adhesion molecule, also designed CD44), etc.