

# CD44 (PN0128) Nb-FC recombinant antibody

CatalogNo: YA0605 Recombinant R

## **Key Features**

Reactivity Applications
• Human • ELISA

# **Recommended Dilution Ratios**

ELISA 1:5000-100000

# Storage

**Storage\*** -15°C to -25°C/1 year(Avoid freeze / thaw cycles)

**Formulation** Phosphate-buffered solution

### **Basic Information**

**Source** Camel, chimeric fusion of Nanobody (VHH) and mouse IgG1 Fc domain, recombinantly

produced from 293F cell

**Purification** Camel, chimeric fusion of Nanobody (VHH) and mouse IgG1 Fc domain, recombinantly

produced from 293F cell

Clone Number PN0128

# Immunogen Information

Immunogen Purified recombinant Human CD44

**Specificity** This recombinant monoclonal antibody can detects endogenous levels of CD44 protein.

# **Target Information**

#### **Gene name**

CD44 LHR MDU2 MDU3 MIC4

#### **Protein Name**

CD44 antigen (CDw44) (Epican) (Extracellular matrix receptor III) (ECMR-III) (GP90 lymphocyte homing/adhesion receptor) (HUTCH-I) (Heparan sulfate proteoglycan) (Hermes antigen) (Hyaluronate receptor) (Phagocytic glycoprotein 1) (PGP-I) (Phagocytic glycoprotein I) (PGP-I) (CD antigen CD44)

Organism	Gene ID	UniProt ID
Human	<u>3458;</u>	<u>P16070</u> ;

#### Cellular Localization

Cell membrane; Single-pass type I membrane protein. Cell projection, microvillus. 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.

#### **Function**

Alternative products: Additional isoforms seem to exist. Additional isoforms are produced by alternative splicing of 10 out of 19 exons within the extracellular domain. Additional diversity is generated through the utilization of internal splice donor and acceptor sites within 2 of the exons. A variation in the cytoplasmic domain was shown to result from the alternative splicing of 2 exons. Isoform CD44 is expected to be expressed in normal cells. Splice variants have been found in many tumor cell lines. Exons 5, 6, 7, 8, 9, 10, 11, 13, 14 and 19 are alternatively spliced. Experimental confirmation may be lacking for some isoforms, Receptor for hyaluronic acid (HA). Mediates cell-cell and cell-matrix interactions through its affinity for HA, and possibly also through its affinity for other ligands such as osteopontin, collagens, and matrix metalloproteinases (MMPs). Adhesion with HA plays an important role in cell migration, tumor growth and progression. Also involved in lymphocyte activation, recirculation and homing, and in hematopoiesis. Altered expression or dysfunction causes numerous pathogenic phenotypes. Great protein heterogeneity due to numerous alternative splicing and post-translational modification events., online information:Blood group antigen gene mutation database,online information:CD44 entry,polymorphism:CD44 is responsible for the Indian blood group system. The molecular basis of the In(A)=In1/In(B)=In2 blood group antigens is a single variation in position 46; In(B), the most frequent allele, has Arq-46.,PTM:N-glycosylated.,PTM:O-glycosylated; contains more-or-less-sulfated chondroitin sulfate glycans, whose number may affect the accessibility of specific proteinases to their cleavage site(s).,PTM:Phosphorylated; activation of PKC results in the dephosphorylation of Ser-706 (constitutive phosphorylation site), and the phosphorylation of Ser-672.,PTM:Proteolytically cleaved in the extracellular matrix by specific proteinases (possibly MMPs) in several cell lines and tumors., similarity: Contains 1 Link domain., subunit: Interacts with HA, as well as other glycosaminoglycans, collagen, laminin, and fibronectin via its N-terminal segment. Interacts with ANK, the ERM proteins (VIL2, RDX and MSN), and NF2 via its C-terminal segment., tissue specificity: An epithelial isoform (CD44E) is expressed by cells of epithelium and highly expressed by carcinomas. An hematopoietic isoform (CD44H) is expressed by cells of mesodermal origin. Expression is repressed in neuroblastoma cells.,

# I Validation Data

### **Contact information**

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Please scan the QR code to access additional product information: CD44 (PN0128) Nb-FC recombinant antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents