

CD44 Antibody (clone BU52, Azide-free)
Mouse Monoclonal Antibody
Catalog # ALS17047**Specification**

CD44 Antibody (clone BU52, Azide-free) - Product Information

Application	IHC, FC
Primary Accession	P16070
Other Accession	960
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	81538

CD44 Antibody (clone BU52, Azide-free) - Additional Information**Gene ID** 960**Other Names**

CD44, CDW44, CD44 antigen, Cell surface glycoprotein CD44, CSPG8, ECMR-III, Epican, HUTCH-I, LHR, MDU2, MC56, MIC4, Hermes antigen, Hyaluronate receptor, Phagocytic glycoprotein 1, PGP-1, PGP-I, Pgp1, Phagocytic glycoprotein I, MDU3, CD44R, HCELL, He ...

Target/Specificity

Epitope 1 of the CD44 molecule.

Reconstitution & Storage

50 mM sodium phosphate, pH 7.5, 100 mM potassium chloride, 150 mM sodium chloride. Store at +4°C. Do not freeze. Open under aseptic conditions.

Precautions

CD44 Antibody (clone BU52, Azide-free) is for research use only and not for use in diagnostic or therapeutic procedures.

CD44 Antibody (clone BU52, Azide-free) - 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

Volume

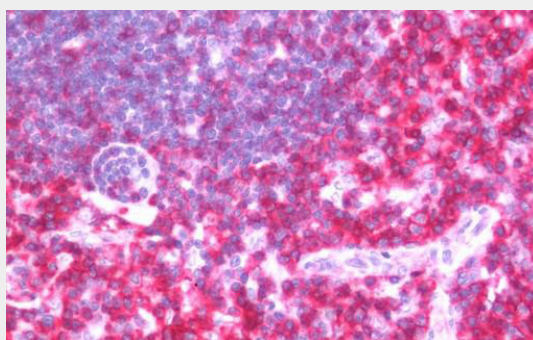
50 µl

CD44 Antibody (clone BU52, Azide-free) - Protocols

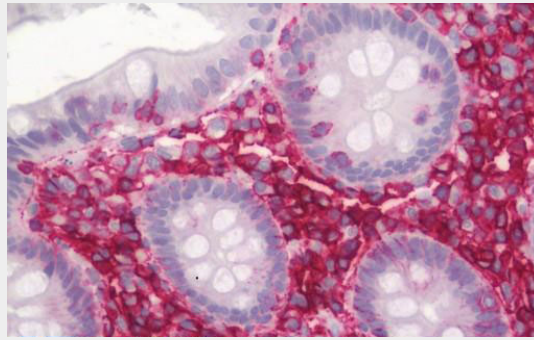
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD44 Antibody (clone BU52, Azide-free) - Images

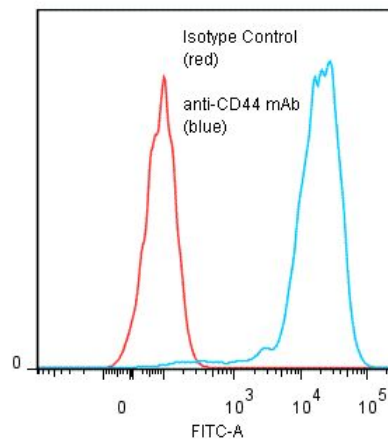


Human Thymus: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Colon: Formalin-Fixed, Paraffin-Embedded (FFPE)

Binding of anti-CD44 mAb +GAM/FITC to human PBMC



Flow cytometry of CD44 antibody

CD44 Antibody (clone BU52, Azide-free) - Background

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. In cancer cells, may play an important role in invadopodia formation. 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.

CD44 Antibody (clone BU52, Azide-free) - References

- Stamenkovic I.,et al.Cell 56:1057-1062(1989).
- Harn H.-J.,et al.Biochem. Biophys. Res. Commun. 178:1127-1134(1991).
- Stamenkovic I.,et al.EMBO J. 10:343-348(1991).
- Dougherty G.J.,et al.J. Exp. Med. 174:1-5(1991).
- Kugelman L.C.,et al.J. Invest. Dermatol. 99:886-891(1992).