

# CD24 Rabbit pAb

CD24 Rabbit pAb Catalog # AP50187

**DISEASE** 

### **Product Information**

Application WB Primary Accession P24807

**Reactivity** Human, Mouse

Predicted Rat
Host Rabbit
Clonality Polyclonal
Calculated MW 7797
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from mouse CD24

**Epitope Specificity** 27-53/76 **Isotype** IgG

**Purity** affinity purified by Protein A

**Buffer** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

**SUBCELLULAR LOCATION** Cell membrane.

SIMILARITY Belongs to the CD24 family.
Post-translational Extensively O-glycosylated.
modifications

Genetic variations in CD24 are associated with susceptibility to multiple sclerosis (MS). A multifactorial, inflammatory, demyelinating disease of the central nervous system. Sclerotic lesions are characterized by perivascular infiltration of monocytes and lymphocytes and appear as indurated areas in pathologic specimens (sclerosis in plaques). The pathological mechanism is regarded as an autoimmune attack of the myelin sheat, mediated by both cellular and humoral immunity. Clinical manifestations include visual loss, extra-ocular movement disorders, paresthesias, loss of sensation, weakness,

dysarthria, spasticity, ataxia and bladder dysfunction. Genetic and environmental factors influence susceptibility to the disease.

Note=Polymorphisms in CD24 may act as a genetic modifier for susceptibility and progression of MS in some populations, perhaps by affecting the

efficiency of CD24 expression on the cell surface.

**Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** This gene encodes a sialoglycoprotein that is expressed on mature

granulocytes and B cells and modulates growth and differentiation signals to these cells. The precursor protein is cleaved to a short 32 amino acid mature peptide which is anchored via a glycosyl phosphatidylinositol (GPI) link to the cell surface. This gene was missing from previous genome assemblies, but is properly located on chromosome 6. Non-transcribed pseudogenes have been designated on chromosomes 1, 15, 20, and Y. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2014]

# **Additional Information**

**Gene ID** 12484

**Other Names** Signal transducer CD24, Lymphocyte antigen 52, Ly-52, M1/69-J11D heat

stable antigen, HSA, Nectadrin, R13-Ag, X62 heat stable antigen, CD24, Cd24,

Cd24a, Ly-52

**Target/Specificity** B-cells. Expressed in a number of B-cell lines including P32/SH and Namalwa.

Expressed in erythroleukemia cell and small cell lung carcinoma cell lines.

Also expressed on the surface of T-cells.

**Dilution** WB=1:500-2000,Flow-Cyt=1ug/Test

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

### **Protein Information**

Name Cd24

Synonyms Cd24a, Ly-52

**Function** May have a pivotal role in cell differentiation of different cell types. May

have a specific role in early thymocyte development. Signaling could be triggered by the binding of a lectin-like ligand to the CD24 carbohydrates, and

transduced by the release of second messengers derived from the GPI-anchor. Modulates B-cell activation responses (By similarity). In

association with SIGLEC10 may be involved in the selective suppression of the immune response to danger- associated molecular patterns (DAMPs) such as HMGB1, HSP70 and HSP90 (PubMed: 19264983). Plays a role in the control of

autoimmunity (PubMed: 20200274).

**Cellular Location** Cell membrane; Lipid-anchor, GPI-anchor.

**Tissue Location** In lymphoid, myeloid, and erythroid cells.

# **Background**

This gene encodes a sialoglycoprotein that is expressed on mature granulocytes and B cells and modulates growth and differentiation signals to these cells. The precursor protein is cleaved to a short 32 amino acid mature peptide which is anchored via a glycosyl phosphatidylinositol (GPI) link to the cell surface. This gene was missing from previous genome assemblies, but is properly located on chromosome 6. Non-transcribed pseudogenes have been designated on chromosomes 1, 15, 20, and Y. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2014]

### References

Kay R., et al.J. Immunol. 147:1412-1416(1991).

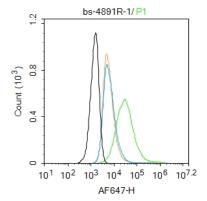
Jackson D., et al. Cancer Res. 52:5264-5270(1992).

Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.

Hough M.R., et al. Genomics 22:154-161(1994).

Zarn J.A., et al. Biochem. Biophys. Res. Commun. 225:384-391(1996).

# **Images**



Blank control: SH-SY5Y.

Primary Antibody (green line): Rabbit Anti-CD24 antibody

(AP50187)

Dilution: 1 µg /10^6 cells;

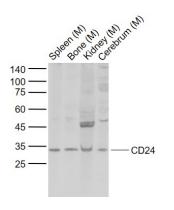
Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF647

Dilution: 1 µg /test.

Protocol

The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000

events was performed.



#### Sample:

Lane 1: Mouse Spleen tissue lysates

Lane 2: Mouse Bone tissue lysates

Lane 3: Mouse Kidney tissue lysates

Lane 4: Mouse Cerebrum tissue lysates

Primary: Anti-CD24 (AP50187) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000

dilution

Predicted band size: 8 kD Observed band size: 33 kD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.