# Rat CD24 / Ly-52 / CD24A Protein (Fc Tag)

Catalog Number: 80297-R02H



SDS-PAGE:

# Sino Biological Inc.

**Biological Solution Specialist** 

# **General Information**

Gene Name Synonym:

CD24A; FLJ22950; FLJ43543; MGC75043; CD24; Cd24a; Ly-52; CD24; Cd24a

#### **Protein Construction:**

A DNA sequence encoding the rat CD24 (Q07490) (Met1-Cys55) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

Source:

Expression Host: Human Cells

## **QC** Testing

**Purity:** > 90 % as determined by SDS-PAGE

Rat

#### Endotoxin:

< 1.0 EU per  $\mu$ g of the protein as determined by the LAL method

#### Stability:

Samples are stable for up to twelve months from date of receipt at -70  $^\circ\!\!\!C$ 

Predicted N terminal: Asn 27

#### **Molecular Mass:**

The recombinant rat CD24/Fc is a disulfide-linked homodimer. The reduced monomer comprises 270 amino acids and has a predicted molecular mass of 29.9 kDa. The apparent molecular mass of the protein is approximately 43-48 kDa in SDS-PAGE under reducing conditions.

#### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

### **Usage Guide**

#### Storage:

Store it under sterile conditions at -20  $^\circ\!\mathrm{C}$  to -80  $^\circ\!\mathrm{C}$  upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

#### **Reconstitution:**

Detailed reconstitution instructions are sent along with the products.



# **Protein Description**

The cluster of differentiation (CD) system is commonly used as cell markers in immunophynotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. Cluster of differentiation 24, also known as signal transducer CD24 or heat stable antigen CD24 (HSA), is a mucin-type glycosylphosphatidylinositol-linked glycoprotein expressed on the surface of B-cells, differentiating neuroblasts and many tumors. It is involved in molecular adhesion and metastatic tumor spread and serve as a normal receptor for P-selectin. The CD24 / P-selectin pathway could be important in dissimenating of tumor cells by facilitating the interaction with platelet and endothelial cells. It has also been considered as a tumor marker. High rate of CD24 expressions have been found in epithelial ovarian cancer, breast cancer, non-small cell lung cancer, prostate cancer and pancreatic cancer.

#### References

1.Zola H, et al. (2007) CD molecules 2006-human cell differentiation molecules. J Immunol Methods. 318 (1-2): 1-5.

2.Ho IC, et al. (2009) GATA3 and the T-cell lineage: essential functions before and after T-helper-2-cell differentiation. Nat Rev Immunol. 9 (2): 125-35.

3.Matesanz-Isabel J, *et al.* (2011) New B-cell CD molecules. Immunology Letters.134 (2): 104-12.