

Rat CD164 / Endolyn Protein (Fc Tag)

Catalog Number: 80354-R02H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

CD164

Protein Construction:

A DNA sequence encoding the rat CD164 (Q9QX82) (Met1-Asp160) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

Source: Rat

Expression Host: HEK293 Cells

QC Testing

Purity: (84.8+14.7) % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Gln 24

Molecular Mass:

The recombinant rat CD164/Fc is a disulfide-linked homodimer. The reduced monomer comprises 378 amino acids and has a predicted molecular mass of 41.3 kDa. The apparent molecular mass of the protein is approximately 90 and 35 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:

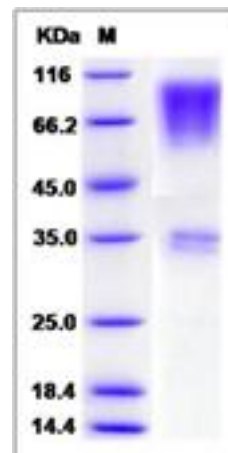
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Sialomucin core protein 24 also known as endolyn or CD164 (cluster of differentiation 164) is a novel 80- to 90-kD mucin-like molecule expressed by human CD34+ hematopoietic progenitor cells. Isoform 1 and isoform 3 of CD164 are expressed in hematopoietic and non-hematopoietic tissues. Isoform 1 is expressed by prostate cancer tumors and prostate cancer cell lines. The expression is greater in bone metastases than in primary tumors. Expression in osseous metastasis is greater than that in soft tissue metastasis. Isoform 2 of CD164 is expressed in the small intestine, colon, lung, thyroid and in colorectal and pancreatic adenocarcinoma. Isoform 4 is expressed by both hematopoietic progenitor cells and bone marrow stromal cells. CD164 belongs to the CD164 family. The cluster of differentiation (cluster of designation) (often abbreviated as CD) is a protocol used for the identification and investigation of cell surface molecules present on white blood cells initially but found in almost any kind of cell of the body, providing targets for immunophenotyping of cells. CD164 may play an important role in prostate cancer metastasis and the infiltration of bone marrow by cancer cells. CD164 promotes myogenesis by enhancing CXCR4-dependent cell motility. This protein positively regulates myoblast migration and promotes myoblast fusion into myotubes. CD164 may play a key role in hematopoiesis by facilitating the adhesion of CD34+ cells to bone marrow stroma and by negatively regulating CD34+hematopoietic progenitor cell growth.

References

1. McGuckin CP, *et al.* (2003) Colocalization analysis of sialomucins CD34 and CD164. *Stem Cells.* 21(2): 162-70.
2. Doyonnas R, *et al.* (2000) CD164 monoclonal antibodies that block hemopoietic progenitor cell adhesion and proliferation interact with the first mucin domain of the CD164 receptor. *J Immunol.* 165(2): 840-51.
3. Zannettino AC, *et al.* (1998) The sialomucin CD164 (MGC-24v) is an adhesive glycoprotein expressed by human hematopoietic progenitors and bone marrow stromal cells that serves as a potent negative regulator of hematopoiesis. *Blood.* 92(8): 2613-28.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217

• Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288

• Tel:+86-400-890-9989

• <http://www.sinobiological.com>