



Rat Anti-Human CD44 Monoclonal antibody, clone Hermes-1 (CABT-L4506)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview

The Hermes-1 monoclonal antibody reacts with human CD44 also known as Hermes, HCAM, and Pgp-1. CD44 is an 80-95 kDa glycoprotein that is expressed on all leukocytes, endothelial cells, hepatocytes, and mesenchymal cells. As an adhesion molecule, CD44 participates in a wide variety of cellular functions including lymphocyte activation, recirculation and homing, and hematopoiesis. CD44 is a receptor for hyaluronic acid and can also interact with other ligands, such as osteopontin, collagens, and matrix metalloproteinases (MMPs). Additionally, CD44 is involved in tumor metastasis and targeting of CD44 by antibodies has been shown to reduce the malignant activities of various neoplasms. Interestingly, high levels of the adhesion molecule CD44 on leukemic cells are essential to generate leukemia.

Target	Human CD44
Immunogen	Human CD44
Isotype	IgG2a, κ
Source/Host	Rat
Species Reactivity	Human
Clone	Hermes-1
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vitro CD44 blockade, WB, IF
Molecular Weight	150 kDa

Format	0.2 μ M filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/ μ g). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction

The protein encoded by this gene is a cell-surface glycoprotein involved in cell-cell interactions, cell adhesion and migration. It is a receptor for hyaluronic acid (HA) and can also interact with other ligands, such as osteopontin, collagens, and matrix metalloproteinases (MMPs). This protein participates in a wide variety of cellular functions including lymphocyte activation, recirculation and homing, hematopoiesis, and tumor metastasis. Transcripts for this gene undergo complex alternative splicing that results in many functionally distinct isoforms, however, the full length nature of some of these variants has not been determined. Alternative splicing is the basis for the structural and functional diversity of this protein, and may be related to tumor metastasis.

Keywords H-CAM

GENE INFORMATION

Official Symbol	CD44 molecule (Indian blood group)
Synonyms	H-CAM
References	Jokela, T., et al. (2015). "Interleukin-1beta-induced Reduction of CD44 Ser-325 Phosphorylation in Human Epidermal Keratinocytes Promotes CD44 Homomeric Complexes, Binding to Ezrin, and Extended, Monocyte-adhesive Hyaluronan Coats." J Biol Chem 290(19): 12379-12393. PubMed;