



## 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.

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

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

## BACKGROUND

<b>Introduction</b>	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.
<b>Keywords</b>	H-CAM

## GENE INFORMATION

<b>Official Symbol</b>	CD44 molecule (Indian blood group)
<b>Synonyms</b>	H-CAM
<b>References</b>	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." <i>J Biol Chem</i> 290(19): 12379-12393. PubMed;