



Mouse Anti-Human CD47 Monoclonal antibody, clone B6.H12 (CABT-L4362)

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

PRODUCT INFORMATION

Product Overview

The B6H12 monoclonal antibody reacts with human CD47 otherwise known as integrin-associated protein (IAP), and neuophilin. CD47 is an approximately 50 kDa glycosylated five transmembrane protein that is ubiquitously expressed by both hematopoietic cells such as T and B lymphocytes, monocytes, platelets and erythrocytes and non-hematopoietic cells. CD47 is involved in a range of cellular processes, including apoptosis, proliferation, adhesion, and migration. Furthermore, it plays a key role in immune and angiogenic responses. CD47 is a receptor for thrombospondin-1 (TSP-1), a secreted glycoprotein that plays a role in vascular development and angiogenesis. CD47 Is has been found to be overexpressed in many different tumor cells. Because of this, anti-CD47 monoclonal antibodies have been proposed and studied as a therapeutic treatment for human cancers. The B6H12 antibody has been shown to neutralize CD47 and inhibit the growth of hepatocellular carcinoma cells in vitro.

Target	Human CD47
Immunogen	Intact CD47 purified from placenta
Isotype	IgG1, κ
Source/Host	Mouse
Species Reactivity	Human
Clone	B6.H12
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vitro CD47 neutralization, in vivo CD47 neutralization in human tumor xenograft models or

humanized mice, FC

Molecular Weight	150 kDa
Format	0.2 µM 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/µg). 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	This gene encodes a membrane protein, which is involved in the increase in intracellular calcium concentration that occurs upon cell adhesion to extracellular matrix. The encoded protein is also a receptor for the C-terminal cell binding domain of thrombospondin, and it may play a role in membrane transport and signal transduction. This gene has broad tissue distribution, and is reduced in expression on Rh erythrocytes. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2010]
Keywords	CD47;CD47 molecule;IAP;OA3;MER6;leukocyte surface antigen CD47;CD47 glycoprotein;Rh-related antigen;integrin associated protein;integrin-associated protein;integrin-associated signal transducer;antigenic surface determinant protein OA3;antigen identified by monoclonal antibody 1D8;CD47 antigen (Rh-related antigen, integrin-associated signal transducer);

GENE INFORMATION

Official Symbol	CD47 molecule
Synonyms	CD47; CD47 molecule; IAP; OA3; MER6; leukocyte surface antigen CD47; CD47 glycoprotein; Rh-related antigen; integrin associated protein; integrin-associated protein; integrin-associated signal transducer; antigenic surface determinant protein OA3; antigen identified by monoclonal antibody 1D8; CD47 antigen (Rh-related antigen, integrin-associated signal transducer);