



Rabbit Anti-Mouse ID1 monoclonal antibody, Clone 48-3 (CABT-L1914)

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

PRODUCT INFORMATION

Specificity	Reacts with mouse ID1, does not react with human ID1. Other species have not been tried.
Target	Mouse ID1
Immunogen	Recombinant full length mouse Id1 recombinant protein.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Mouse
Clone	48-3
Purification	Protein G Purified
Conjugate	Unconjugated
Applications	WB, IHC
Format	Liquid (cell culture supernatant)
Buffer	Cell culture supernatant with 0.25% BSA
Preservative	0.05% Sodium Azide
Storage	2-8°C. DO NOT FREEZE. Precipitation may occur upon freezing.

BACKGROUND

Introduction

There are four members of the Id protein family, Id1, Id2, Id3, and Id4. These proteins were initially discovered as proteins involved in the negative control of cell differentiation. Id proteins act as a negative regulator of transcription through physical interaction with a group of transcription factors known as bHLH (basic helix-loop-helix) proteins. Id proteins interact with bHLH proteins in a manner that prevents DNA binding to the HLH proteins. Because of this activity, the group of proteins were named as Id (for inhibitor of DNA binding). Id proteins have also been found to bind with a number of other proteins such as Rb, Ets, Paz, MIDA-1 and SREBP-1c. Id proteins may play a central role in coordinating gene expression, cell proliferation, tumorigenesis, and angiogenesis. Id proteins have been found to be over-expressed in many types, including Glioblastoma, Medulloblastoma, Neuroblastoma, Pancreatic Cancer, Thyroid Cancer, Squamous Cell Carcinoma, Breast Carcinoma, Endometrial Cancer, Cervical Cancer, Melanoma, and Retinoblastoma. There is a growing body of evidence that Id1 and Id3 play a central role in angiogenesis. Experiments in Id1-/-, Id3-/- knockout mice indicated that with the loss of Id expression there was no vascularization and no subsequent growth of tumors.

Keywords

ID1; inhibitor of DNA binding 1, dominant negative helix-loop-helix protein; DNA-binding protein inhibitor ID-1; bHLHb24; dJ857M17.1.2; DNA binding protein inhibitor ID 1; inhibitor of differentiation 1; class B basic helix-loop-helix protein 24; dJ857M17.1.2 (inhibitor of DNA binding 1, dominant negative helix-loop-helix protein); ID

GENE INFORMATION

Gene Name

ID1 inhibitor of DNA binding 1, dominant negative helix-loop-helix protein [Homo sapiens (human)]

Official Symbol

ID1

Synonyms

ID1; inhibitor of DNA binding 1, dominant negative helix-loop-helix protein; DNA-binding protein inhibitor ID-1; bHLHb24; dJ857M17.1.2; DNA binding protein inhibitor ID 1; inhibitor of differentiation 1; class B basic helix-loop-helix protein 24; dJ857M17.1.2 (inhibitor of DNA binding 1, dominant negative helix-loop-helix protein); ID

Entrez Gene ID

[3397](#)

UniProt ID

[P41134](#)

Chromosome Location

20q11

Pathway

ALK1 signaling events, organism-specific biosystem; IL-3 Signaling Pathway, organism-specific biosystem; Id Signaling Pathway, organism-specific biosystem; Notch-mediated HES/HEY network, organism-specific biosystem; TGF-beta signaling pathway, organism-specific biosystem; TGF-beta signaling pathway, conserved biosystem

Function

protein binding; protein dimerization activity; sequence-specific DNA binding transcription factor

activity;
