



Rabbit Anti Human ID2 monoclonal antibody, Clone 0-3-9 (CABT-L1917)

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

PRODUCT INFORMATION

Specificity	Reacts with mouse and human ID2. Other species have not been tested
Target	Mouse ID2, Human ID2
Immunogen	Recombinant full length human Id2 recombinant protein.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse
Clone	0-3-9
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

ID2; inhibitor of DNA binding 2, dominant negative helix-loop-helix protein; DNA-binding protein inhibitor ID-2; bHLHb26; cell growth inhibiting gene 8; GIG8; helix-loop-helix protein ID2; cell growth-inhibiting gene 8; inhibitor of differentiation 2; DNA-binding protein inhibitor ID2

GENE INFORMATION

Gene Name	ID2 inhibitor of DNA binding 2, dominant negative helix-loop-helix protein [Homo sapiens (human)]
Official Symbol	ID2
Synonyms	ID2; inhibitor of DNA binding 2, dominant negative helix-loop-helix protein; DNA-binding protein inhibitor ID-2; bHLHb26; cell growth inhibiting gene 8; GIG8; helix-loop-helix protein ID2; cell growth-inhibiting gene 8; inhibitor of differentiation 2; DNA-binding protein inhibitor ID2
Entrez Gene ID	3398
UniProt ID	Q02363
Chromosome Location	2p25
Pathway	HIF-1-alpha transcription factor network, organism-specific biosystem; Id Signaling Pathway, organism-specific biosystem; Regulation of Wnt-mediated beta catenin signaling and target gene transcription, organism-specific biosystem; TGF-beta signaling pathway, organism-specific biosystem; TGF-beta signaling pathway, conserved biosystem; Transcriptional misregulation in cancer, organism-specific biosystem; Transcriptional misregulation in cancer, conserved biosystem
Function	ion channel binding; protein binding; protein dimerization activity;