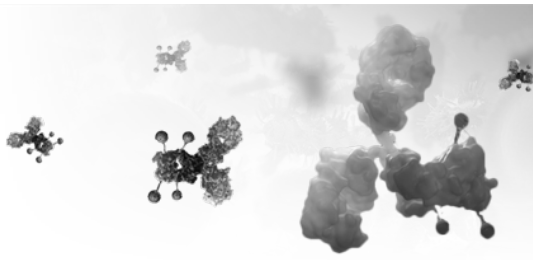

Rabbit Anti-Human ID4 monoclonal antibody, Clone 93-23 (CABT-L1922)

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

PRODUCT INFORMATION

Specificity	Reacts with mouse ID4 and human ID4.
Target	Mouse ID4, Human ID4
Immunogen	Full length recombinant Human Id4-GST
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse
Clone	93-23
Purification	Protein G Purified
Conjugate	Unconjugated
Applications	WB, IHC
Format	Liquid
Concentration	0.05 mg/ml
Size	100 µg
Buffer	0.015 M KPO4, 0.85% (w/v) NaCl, 0.25% (w/v) BSA, pH 7.40.
Preservative	0.1% Sodium Azide
Storage	2-8°C. DO NOT FREEZE.

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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	ID4; inhibitor of DNA binding 4, dominant negative helix-loop-helix protein; DNA-binding protein inhibitor ID-4; bHLHb27; class B basic helix-loop-helix protein 27; IDB4

GENE INFORMATION

Gene Name	ID4 inhibitor of DNA binding 4, dominant negative helix-loop-helix protein [Homo sapiens (human)]
Official Symbol	ID4
Synonyms	ID4; inhibitor of DNA binding 4, dominant negative helix-loop-helix protein; DNA-binding protein inhibitor ID-4; bHLHb27; class B basic helix-loop-helix protein 27; IDB4
Entrez Gene ID	3400
UniProt ID	P47928
Chromosome Location	6p22.3
Pathway	Id Signaling Pathway, organism-specific biosystem; TGF-beta signaling pathway, organism-specific biosystem; TGF-beta signaling pathway, conserved biosystem
Function	RNA polymerase II transcription factor binding; protein binding; protein dimerization activity; transcription corepressor activity;

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