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Rabbit Anti-ID4 antibody

SL6669R

Product Name:	ID4
Chinese Name:	DNA结合抑制因子4抗体
Alias:	bHLHb27; Class B basic helix-loop-helix protein 27; DNA binding protein inhibitor ID 4; DNA binding protein inhibitor ID4; DNA-binding protein inhibitor ID-4; ID 4; Id4; ID4_HUMAN; IDB4; Inhibitor of DNA binding 4; Inhibitor of DNA binding 4 dominant negative helix loop helix protein.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	18kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ID4:61-160/161
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Members of the Id family of basic helix-loop-helix (bHLH) proteins include Id1 (1–3), Id2 (4), Id3 and Id4 (5). They are ubiquitously expressed and dimerize with members of the class A and B HLH proteins (1–5). Due to the absence of the basic region, the resulting heterodimers cannot bind DNA. The Id-type proteins thus appear to negatively

regulate DNA binding of bHLH proteins. Since Id1 inhibits DNA binding of E12 and Myo D, it apparently functions to inhibit muscle-specific gene expression. Under conditions that facilitate muscle cell differentiation, the Id protein levels fall, allowing E12 and/or E47 to form heterodimers with Myo D and myogenin, which in turn activate myogenic differentiation. It has been shown that expression of each of the Id proteins is strongly dependent on growth factor activation and that reduction of Id mRNA levels by antisense oligonucleotides leads to a delayed reentry of arrested cells into the cell cycle following growth factor stimulation.

Function:
ID (inhibitor of DNA binding) HLH proteins lack a basic DNA-binding domain but are able to form heterodimers with other HLH proteins, thereby inhibiting DNA binding.

Subcellular Location:
Nucleus.

Similarity:
Contains 1 basic helix-loop-helix (bHLH) domain.

SWISS:
P47928

Gene ID:
3400

Database links:

Entrez Gene: 3400Human

Entrez Gene: 15904Mouse

Entrez Gene: 291023Rat

Omim: 600581Human

SwissProt: P47928Human

SwissProt: P41139Mouse

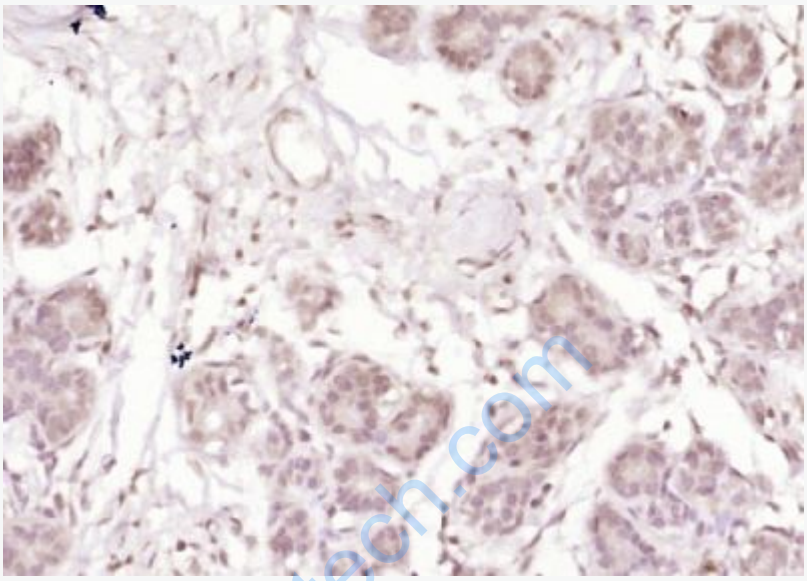
SwissProt: Q06AV5Pig

Unigene: 519601Human

Unigene: 458006Mouse

Unigene: 22987Rat

Important Note:

	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	 Paraformaldehyde-fixed, paraffin embedded (human breast); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ID4) Polyclonal Antibody, Unconjugated (SL6669R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.