

#3431 Store at -20C

## Id2 (D39E8) Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M Mk	Endogenous	15	Rabbit IgG	#Q02363	3398

## Product Usage Information

## Application

Western Blotting

## Dilution

1:1000

Immunoprecipitation

1:50

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

## Specificity / Sensitivity

Id2 (D39E8) Rabbit mAb detects endogenous levels of total Id2 protein.

## Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Asn97 of human Id2 protein.

## Background

Inhibitor of DNA-binding-2 (Id2) is a member of the Id proteins which belong to the helix-loop-helix (HLH) protein family. The Id protein functions by binding to specific transcription factors and preventing their dimerization and DNA binding (1-3). Id2 interacts with a wide variety of transcription factors including E proteins (5), TCS (4), Pax (3) and the tumor suppressor Rb (1). Id2 has been shown to be important in regulating cellular differentiation, proliferation, development and tumorigenesis (6-8). In tumor cells, increased levels of Id2 functionally inactivate Rb, leading to cellular transformation and cancer (9,10). Id2 is therefore a promising therapeutic target for treatment of cancer (11).

## Background References

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3. Roberts, E.C. et al. (2001) *Mol Cell Biol* 21, 524-33.
4. Yates, P.R. et al. (1999) *EMBO J* 18, 968-76.
5. Engel, I. and Murre, C. (2001) *Nat Rev Immunol* 1, 193-9.
6. Benezra, R. et al. (2001) *Oncogene* 20, 8334-41.
7. Lasorella, A. et al. (2001) *Oncogene* 20, 8326-33.
8. Zebedee, Z. and Hara, E. (2001) *Oncogene* 20, 8317-25.
9. Gabellini, C. et al. (2006) *Oncogene* 25, 5326-32.
10. Perk, J. et al. (2005) *Nat Rev Cancer* 5, 603-14.
11. Gray, M.J. et al. (2008) *Oncogene* 27, 7192-200.

## Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

## Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

## Applications Key

**WB:** Western Blotting **IP:** Immunoprecipitation

## Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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