Qty: 100 µg/400 µl

Rabbit anti-HDAC2
Catalog No. 51-5100

Lot No. See product label

Rabbit anti-HDAC2

FORM
This polyclonal antibody is supplied as a 400 µl aliquot at 0.25 mg/ml in phosphate buffered saline (pH 7.4) containing 0.1% sodium azide. The antibody is affinity-purified from rabbit antiserum using a peptide-coupled gel.

POLYCLONAL ANTIBODY DESIGNATION (PAD): HP2

IMMUNOGEN
A synthetic 11 amino acid peptide derived from the C-terminus of the mouse HDAC2 protein. This sequence differs between mouse and chicken HDAC2 proteins by a single amino acid.

SPECIFICITY
This antibody is specific for HDAC2 and does not cross react with the related HDAC1 or HDAC3 proteins.

REACTIVITY
Reactivity of this antibody on Western blots was confirmed using recombinant HDAC2 protein as well as HeLa cell lysates. Species reactivity of this antibody includes mouse, human. Based on sequence homology, reactivity with chicken HDAC is likely (see IMMUNOGEN section).

USAGE
Working concentrations for specific applications should be determined by the investigator. Appropriate working concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. We recommend the following ranges as starting points for this product.

ELISA:	0.1-1.0 µg/ml
Western Blotting:	1-2 µg/ml
Immunoprecipitatioin (native):	5 µg

STORAGE
Store at 2-8°C for up to one month. Store at –20°C for long term storage. Avoid repeated freezing and thawing.

BACKGROUND
Covalent modification of histone proteins plays an important role in the regulation of gene expression. In particular, acetylation of lysine residue on core histone proteins alters nucleosomal conformation and thereby regulates the accessibility of transcriptional regulatory proteins to chromatin templates. The causal relationship between histone acetylation and gene expression has been furthered by the identification of which posses intrinsic histone acetylase and deacetylase activity. Of the protein which posses intrinsic histone deacetylase activity, the best described are members of a common family who's founding members were human HDAC1 and yeast Rpd3. HDAC1 is a 55 kDa protein which is 60% identical to the yeast global transcriptional regulator, Rpd3p. The ~50 kDa HDAC2 (also referred to as mRPD3) protein is 85% identical to HDAC1. HDAC2 was identified as a protein that interacts with the sequence-specific activator/repressor YY1. The HDAC proteins do not possess either a DNA-binding domain or a protein interaction domain.

(cont'd)

REFERENCES

1. Pazin, M.J. and Kadonaga, J.T. *Cell* 89: 325-326 (1997). *Review*
2. Laherty, C. D., et al. *Cell* 89:349-356 (1997).
3. Heinzel, T., et al. *Nature* 387:43-48 (1997).

RELATED PRODUCTS

Product	***Conjugate***	***Cat. No.***
Goat anti-Rabbit IgG (H+L)	Purified	81-6100
(ZyMAX™ Grade)	FITC	81-6111
	TRITC	81-6114
	Cy™3	81-6115
	Cy™5	81-6116
	HRP	81-6120
	AP	81-6122
	Biotin	81-6140
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

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