

DESCRIPTION

Species Reactivity	Human/Rat
Specificity	Detects human Histone Deacetylase 2/HDAC-2 in direct ELISAs and human and rat Histone Deacetylase 2/HDAC-2 Western blots. In direct ELISAs, no cross-reactivity with recombinant human HDAC1 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 806116
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Histone Deacetylase 2/HDAC-2 Pro386-Pro488 Accession # Q92769
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Histone deacetylase 2 (HDAC2), is a ubiquitously expressed intracellular enzyme that is involved in the post-translational modification of proteins. Acetyl groups are added to e-NH₃ on lysine residues by acetyltransferases and removed by HDACs. The balance between these reactions has widespread effects on the enzymatic activity, subcellular localization, and molecular interactions of the substrates. HDAC2 can associate into several multiprotein complexes with discrete functions. Acetylation of core histones (H2A, H2B, H3, and H4) alters their interaction with DNA and the local availability of DNA for transcription. The function of HDAC2 itself is regulated by several post-translational modifications including phosphorylation, acetylation, ubiquitination, tyrosine nitrosylation, and cysteine carbonylation. Within aa 386-488, human HDAC2 shares 98% and 96% aa sequence identity with mouse and rat HDAC2, respectively.

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