

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human/Mouse/Rat                                                                                                                                                                                                                                                             |
| <b>Specificity</b>        | Detects human, mouse, and rat Histone Deacetylase 2/HDAC2 in Western blots. In direct ELISAs, less than 2% cross-reactivity with recombinant human HDAC1 is observed.                                                                                                       |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human Histone Deacetylase 2/HDAC2<br>Pro386-Pro488<br>Accession # Q92769                                                                                                                                                                |
| <b>Conjugate</b>          | Alexa Fluor 700<br>Excitation Wavelength: 675-700 nm<br>Emission Wavelength: 723 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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

HDAC2 (Histone deacetylase 2; also HD2) is a 55-60 kDa nuclear member of the class I subfamily, histone deacetylase family of transcriptional regulators. It is found in a variety of cell types including monocytes, cardiac muscle cells and neurons. HDAC2 is also crucial for embryonic development. HDAC2 catalyzes the hydrolytic release of acetyl groups from acetylated histone proteins. Within the context of a large complex, this has the effect of repressing gene activity. Human HDAC2 is 488 amino acids (aa) in length. It contains one histone deacetylation domain (aa 29-388), plus sites for phosphorylation, nitrosylation, ubiquitination, and nitration. There is one alternative start site at Met31. Over aa 386-488, human HDAC2 shares 98% and 53% aa sequence identity with mouse HDAC2 and human HDAC1, respectively.

#### PRODUCT SPECIFIC NOTICES

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