

#### DESCRIPTION

|                                                                                                                                                                                                         |                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human/Mouse                                                                                                                                   |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human HDAC8 in direct ELISAs and Western blots.                                                                                       |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                                                                          |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                                                                     |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human HDAC8 isoform 1<br>Met1-Val377 (Leu31Pro)<br>Accession # Q9BY41 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 nm                                                               |
| <b>Formulation</b>                                                                                                                                                                                      | 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.

|                                             |                                                                        |
|---------------------------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>                         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Chromatin Immunoprecipitation (ChIP)</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### BACKGROUND

HDAC8 (Histone deacetylase 8) is a 50 kDa member of the class I subfamily, histone deacetylase family of transcriptional regulators. It is a smooth muscle enzyme that deacetylates histone lysines, blocking gene transcription. HDAC8 appears to function as a monomer, and phosphorylation at Ser39 inhibits activity. Human HDAC8 is 377 amino acids (aa) in length. It contains a series of  $\alpha$  helices and strands, plus a catalytic ferrous ion binding site (Asp178-His180-Asp267). There are four potential splice variants, all of which possess an alternate start site 38 aa upstream of the standard start site. Three have additional changes; two show a one and three aa substitution respectively for aa 211-377, while a third has a 15 aa substitution for aa 148-377. Human HDAC8 shares more than 96% aa identity with both mouse and canine HDAC8.

#### PRODUCT SPECIFIC NOTICES

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