

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human Carnosine Dipeptidase 1/CNDP1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human CNDP2 is observed.                                                                                           |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 352216                                                                                                                                                                                                                            |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human Carnosine Dipeptidase 1/CNDP1<br>Pro28-His507<br>Accession # Q96KN2                                                                                                                                                   |
| <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<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.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b>  | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunoprecipitation</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

The human CNDP1 gene encodes carnosine dipeptidase 1, a member of the M20 family of metalloproteases (1, 2). Also known as X-His dipeptidase, glutamate carboxypeptidase-like protein 2 (CPGL-2) or carnosinase 1 (CN1), CNDP1 is a secreted dipeptidase with a narrow specificity for Xaa-His dipeptides including those with Xaa = β-Ala (carnosine) and Xaa = γ-aminobutyric acid (homocarnosine), two naturally occurring dipeptides with potential neuroprotective and neurotransmitter functions in the brain. In comparison, a closely related protein known as CNDP2, CPGL or CN2, is a cytosolic nonspecific dipeptidase.

#### PRODUCT SPECIFIC NOTICES

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