

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human Carboxylesterase 2/CES2 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human CES1, recombinant mouse (rm) CES2, rmCES3, and rmCES5 is observed.                                                         |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human Carboxylesterase 2/CES2<br>Gln27-Leu559<br>Accession # O00748                                                                                                                                                         |
| <b>Conjugate</b>          | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 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>Immunohistochemistry</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

CES2 (Carboxylesterase 2; also CE-2) is a glycosylated, monomeric member of the type-B carboxylesterase/lipase family of enzymes. Although it runs at 59-62 kDa in SDS-PAGE, Gel filtration assigns an 80 kDa MW to it. CES2 is an ER luminal enzyme that catalyzes the conversion of carboxylic ester to alcohol. It is found in small intestine and liver, and likely participates in the detoxification of drugs. Mature human CES2 is 533 amino acids (aa) in length (aa 27-559). It contains a catalytic site composed of Ser228Glu345His457, and an ER-retention motif over aa 556 - 559. Individually or in combination, splice variants may show an alternate start site 64 aa upstream of the standard site, a Val substitution for aa 458-474, or a nine aa insertion after Met1. Over the length of the precursor (aa 1-559) human CES2 shares 72% aa identity with mouse CES2.

#### PRODUCT SPECIFIC NOTICES

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