

DESCRIPTION

Species Reactivity	Human
Specificity	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.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Carboxylesterase 2/CES2 Gln27-Leu559 Accession # O00748
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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.
Immunohistochemistry	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

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

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.