

DESCRIPTION

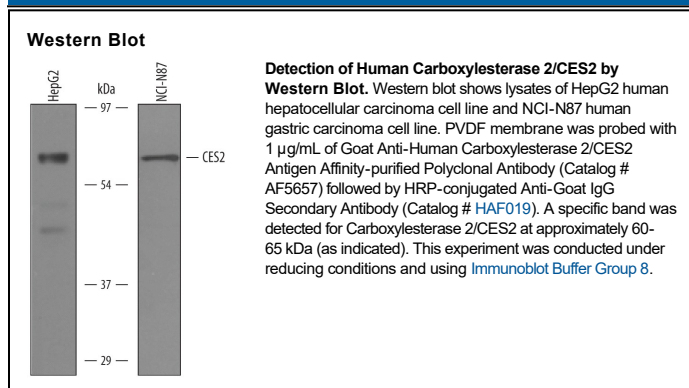
Species Reactivity	Human
Specificity	Detects human Carboxylesterase 2/CES2 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human CES1, recombinant mouse (rm) CES2, rmCES3, and rmCES5 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Carboxylesterase 2/CES2 Gln27-Leu559 Accession # O00748
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	Immersion fixed paraffin-embedded sections of human liver

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.