

DESCRIPTION

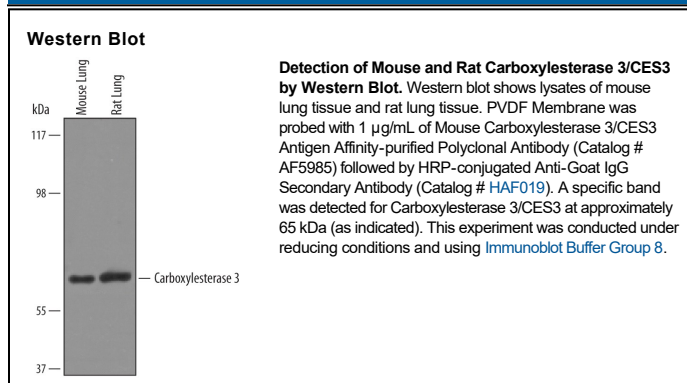
Species Reactivity	Mouse/Rat
Specificity	Detects recombinant mouse Carboxylesterase 3/CES3 in direct ELISAs and Western blots. Detects intrinsic CES3 in mouse and rat tissues in Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) CES1, rhCES2, recombinant mouse (rm) CES2, and rmCES5 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Carboxylesterase 3/CES3 Tyr19-Glu561 Accession # Q8VCT4
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
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Mouse Carboxylesterase 3/CES3 (Catalog # 5428-CE), see our available Western blot detection antibodies

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

Carboxylesterase 3 is a member of a large family of carboxylesterases that are responsible for the hydrolysis of ester and amide bonds (1, 2). These carboxylesterases are widely distributed in mammalian tissues and have broad substrate specificity ranging from small molecule esters such as phenylester to long-chain fatty acid esters and thioesters. Because many ester-containing drugs require the ester linkage to improve the bioavailability of therapeutic agents, CESs play a major role in drug metabolism and activation. CES3 is also known as triacylglycerol hydrolase for its lipolytic activity. It has been reported to be the major lipase in white adipose tissue (3). Mouse CES3 shares 93% homology with rat CES3.

References:

- Redinbo, M. R. and Potter, P.M. (2005) Drug Discovery Today. **10**:313.
- Satoh, T. and Hosokawa, M. (2006) Chem.-Biol. Interactions. **162**:195.
- Soni, K. G. *et al.* (2004) J. Biol. Chem. **279**:40683.