

DESCRIPTION

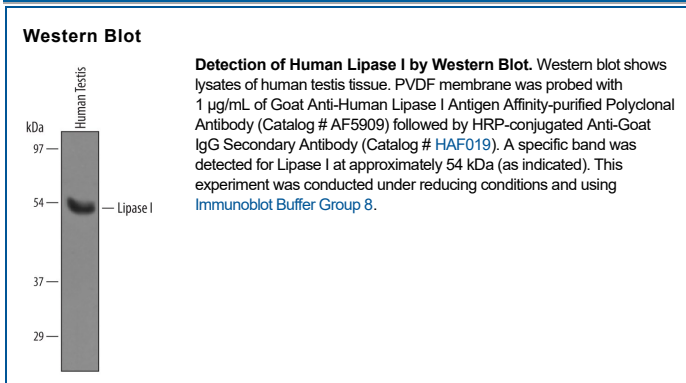
Species Reactivity	Human
Specificity	Detects human Lipase I in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Lipase I Arg14-His154 Accession # Q6XZB0
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with 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

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

Lipase I (Lipase member I; also mPA-PLA₁β, LPDL and PLA1C) is a 55 kDa member of the PLA₁ subfamily, pancreatic lipase family, AB hydrolase superfamily of enzymes. It is expressed by sperm, where it is apparently secreted and subsequently binds to membrane-associated HSPGs. Lipase I hydrolyzes phosphatidic acid to generate 2-acyl-LPA, which then activates one of four G-protein coupled receptors. Human Lipase I precursor is 460 amino acids (aa) in length. It contains a 15 aa signal sequence, followed by an active catalytic site composed of Ser159, Asp183 and His268. Lipase I is known to be phosphorylated on Ser25. There are two isoform variants, both of which show a 34 aa substitution for aa 1-13, and only one of which shows an eight aa substitution for aa 245-460. Over aa 14-154, human Lipase I shares 61% aa identity with mouse Lipase I.