

DESCRIPTION

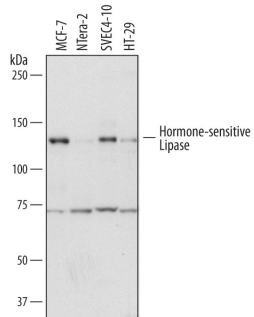
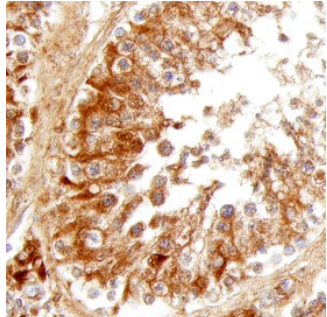
Species Reactivity	Human
Specificity	Detects human Hormone-sensitive Lipase/HSL in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 729923
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Hormone-sensitive Lipase/HSL Met302-Leu425 Accession # Q05469
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 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	2 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human and Mouse Hormone-sensitive Lipase/HSL by Western Blot. Western blot shows lysates of MCF-7 human breast cancer cell line, Ntera-2 human testicular embryonic carcinoma cell line, SVEC4-10 mouse vascular endothelial cell line, and HT-29 human colon adenocarcinoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human Hormone-sensitive Lipase/HSL Monoclonal Antibody (Catalog # MAB7104) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). Specific bands were detected for Hormone-sensitive Lipase/HSL at approximately 70 kDa and 130 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>Hormone-sensitive Lipase/HSL in Human Testis. Hormone-sensitive Lipase/HSL was detected in immersion fixed paraffin-embedded sections of human testis using Mouse Anti-Human Hormone-sensitive Lipase/HSL Monoclonal Antibody (Catalog # MAB7104) at 8 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm of spermatocytes. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

HSL (hormone-sensitive lipase), also called LIPE, is an 84 kDa phosphoprotein that is the rate-limiting enzyme in the catalytic breakdown of triglycerides. The human 775 amino acid (aa) form is active in adipose tissue and skeletal muscle. Within the region used as an immunogen, human HSL shares 92% and 93% aa sequence identity with mouse and rat HSL, respectively. HSL translocates to triglyceride-metabolizing lipid droplets in response to epinephrine or contraction in skeletal muscle, but to the cytosol following insulin treatment of adipocytes. A 120 kDa isoform of human HSL with a 301 aa N-terminal extension is present in the testes, localized to elongating spermatids and spermatozoa.