**DESCRIPTION**

**Species Reactivity**  Human

**Specificity**  Detects human Hormone-sensitive Lipase/HSL in direct ELISAs.

**Source**  Monoclonal Mouse IgG2B Clone # 729923

**Purification**  Protein A or G purified from hybridoma culture supernatant

**Immunogen**  E. coli-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 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**  2 μg/mL  See Below
- **Immunohistochemistry**  8-25 μg/mL  See Below

**DATA**

**Western Blot**

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, 5/6EC4-10 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.

**Immunohistochemistry**

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.

**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 poloc packs. Upon receipt, store it immediately at -20 to -70 °C

**Stability & Storage**  Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 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.

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**Human Hormone-sensitive Lipase/HSL Antibody**

Monoclonal Mouse IgG2B Clone # 729923

Catalog Number: MAB7104

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