

## **Human SGPL1 Antibody**

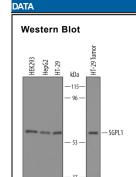
Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF5535

DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human SGPL1 in direct ELISAs and Western blots.		
Source	Polyclonal Goat IgG		
Purification	Antigen Affinity-purified		
Immunogen	E. coli-derived recombinant human SGPL1 Lys342-His568 Accession # O95470		
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.		

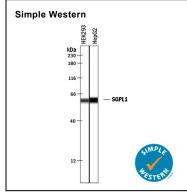
## APPLICATIONS

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
Simple Western	50 μg/mL	See Below



Detection of Human SGPL1 by Western Blot. Western blot shows lysates of HEK293 human embryonic kidney cell line, HepG2 human hepatocellular carcinoma cell line, HT-29 human colon adenocarcinoma cell line, and HT-29 human colon adenocarcinoma cell line, and HT-29 humor tissue. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human SGPL1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5535) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for SGPL1 at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.



Detection of Human SGPL1 by Simple WesternTM. Simple Western lane view shows lysates of HEK293 human embryonic kidney cell line and HepG2 human hepatocellular carcinoma cell line, loaded at 0.2 mg/mL. A specific band was detected for SGPL1 at approximately 60 kDa (as indicated) using 50 µg/mL of Goat Anti-Human SGPL1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5535) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

## 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

- 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

SGPL1 (Sphingosine-1-phosphate lyase; also hSPL) is a 60-63 kDa member of the SGPL1 subfamily, group II decarboxylase family of enzymes. It is very widely expressed, and particularly concentrated in cells undergoing rapid turnover. SGPL1 is found in the ER, and cleaves phosphorylated sphingoid bases into fatty aldehydes and phosphoethanolamine. This regulates a diversity of cellular processes such as apoptosis and T cell migration. Human SGPL1 is 568 amino acids (aa) in length. It is a type III transmembrane protein (luminal N-terminus with no signal sequence) that contains a 507 aa cytoplasmic domain (aa 62-568). This domain contains a vitamin B6 binding site (aa 344-364) that is part of a large catalytic region (aa 116-506). Over aa 342-568, human SGPL1 shares 86% aa identity with mouse SGPL1.

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