

DESCRIPTION

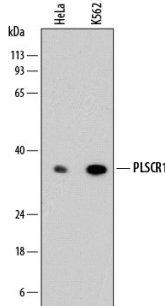
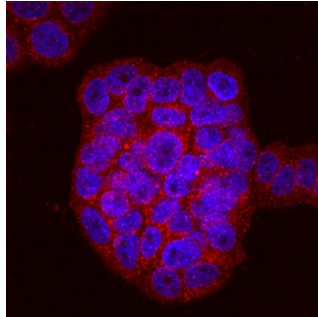
Species Reactivity	Human
Specificity	Detects human Phospholipid Scramblase 1/PLSCR1 in ELISA.
Source	Monoclonal Mouse IgG ₁ Clone # 875327
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Phospholipid Scramblase 1/PLSCR1 Met1-Pro84 Accession # O15162
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	1 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p> 	<p>Detection of Human Phospholipid Scramblase 1/PLSCR1 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line and K562 human chronic myelogenous leukemia cell line. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human Phospholipid Scramblase 1/PLSCR1 Monoclonal Antibody (Catalog # MAB8137) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Phospholipid Scramblase 1/PLSCR1 at approximately 37 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>Phospholipid Scramblase 1/PLSCR1 in HT-29 Human Cell Line. Phospholipid Scramblase 1/PLSCR1 was detected in immersion fixed HT-29 human colon adenocarcinoma cell line using Mouse Anti-Human Phospholipid Scramblase 1/PLSCR1 Monoclonal Antibody (Catalog # MAB8137) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
---	---	--

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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

PLSCR1 (phospholipid scramblase 1) is an approximately 37 kDa, type II transmembrane protein that is a member of the Ca²⁺-dependent phospholipid scramblase family that regulates phospholipid asymmetry of membranes. It is most highly expressed on erythrocytes and platelets, and plays roles in exocytosis and apoptosis. PLSCR1 also has nuclear activity, for example, as an activator of genes in response to interferons. The 318 amino acid (aa) human PLSCR1 contains a 288 aa cytoplasmic domain with three SH3-binding and two WW-binding adaptor domains, three phosphorylation sites, four potential palmitoylation sites (regulating localization to the nucleus or plasma membrane) and a nuclear localization signal, followed by a transmembrane domain and a short extracellular domain. The N-terminus of human PLSCR1 (aa 1-84) shares <60% aa sequence identity with mouse and rat PLSCR1. Potential isoforms have a downstream start site without (311 aa) or with (186 aa) divergence after aa 192, or an upstream start site with divergence of 1 or 11 aa after aa 192 (205, 215 aa).