

**DESCRIPTION**

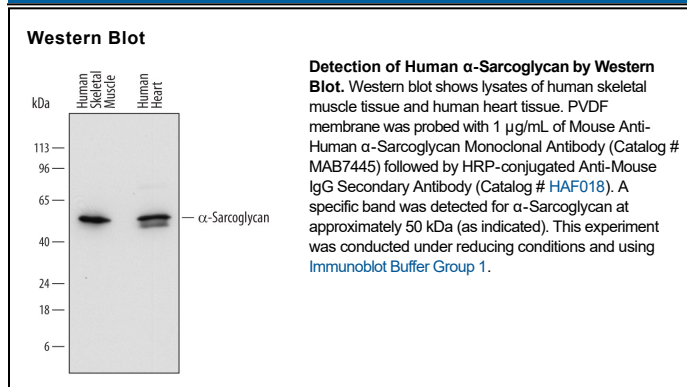
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human $\alpha$ -Sarcoglycan in direct ELISAs and Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 769109
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human $\alpha$ -Sarcoglycan Gln24-Ala290 (predicted) Accession # Q16586
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m 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 $\mu$ m 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 $\mu$ g/mL	See Below

**DATA**



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

Alpha-sarcoglycan is one of six known sarcoglycans, which are type I ( $\alpha$ - and  $\epsilon$ -) or type II ( $\beta$ -,  $\gamma$ -,  $\delta$ - or  $\zeta$ -) transmembrane glycoproteins. Sarcoglycans  $\alpha$  and  $\gamma$  are expressed exclusively in the sarcoplasmic reticulum in skeletal and cardiac muscle, while others are more widely expressed. Sarcoglycans form heterotetrameric, pentameric and hexameric membrane glycoprotein complexes (SGC). SGC interacts laterally with the dystroglycan complex, and both complexes are components of the dystrophin-associated glycoprotein complex (DGC), which forms a link between the cytoskeleton and the extracellular matrix. Mutations in sarcoglycans are associated with recessive autosomally inherited limb-girdle muscular dystrophy. Human  $\alpha$ -sarcoglycan shares 90% amino acid sequence identity with mouse and rat  $\alpha$ -sarcoglycan within the extracellular domain.