Human SARM1 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF7037

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SARM1 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human SARM1 Lys556-Thr724 Accession # Q6SZW1
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.

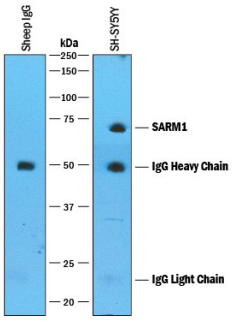
APPLICATIONS

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	0.1 µg/mL	SH-SY5Y human neuroblastoma cell line
Immunocytochemistry	5-15 µg/mL	See Below
Immunoprecipitation	4 µg/mL	See Below

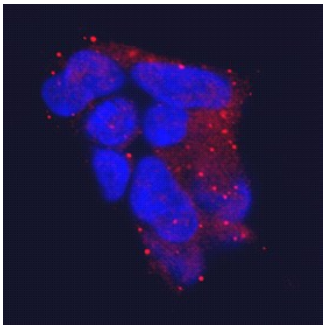
DATA

Immunoprecipitation



Immunoprecipitation of Human SARM1. SARM1 was immunoprecipitated from 400 µg of SH-SY5Y human neuroblastoma cell line lysates using 4 µg of Sheep Anti-Human SARM1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7037) coated on 4 wells of a 96 well plate (Corning Costar EIA/RIA). SH-SY5Y lysates or control buffer were added to the wells and incubated for 2 hours at room temperature. Immunoprecipitated SARM1 was detected by Western blot under reducing conditions using 1.0 µg/mL Sheep Anti-Human SARM1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7037) and Immunoblot Buffer Group 1. View our recommended buffer recipes for Immunoprecipitation.

Immunocytochemistry



SARM1 in HEK293 Human Cell Line. SARM1 was detected in immersion fixed HEK293 human embryonic kidney cell line using Sheep Anti-Human SARM1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7037) at 1.7 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

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
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

SARM1 (Sterile alpha and TIR motif-containing protein 1; also SAM domain-containing protein 2 and TIR-1 homolog) is a 73-75 kDa member of the TLR adaptor family of molecules. It is both nuclear and cytoplasmic, and expressed in monocytes, neurons, and retinal photoreceptor cells, where it demonstrates disparate activities. In monocytes, SARM1 is a specific inhibitor of TRIF-dependent TLR-3 and -4 signaling, and appears to block MAPK phosphorylation. In neurons, SARM1 regulates microtubule stability, and thus axon and dendrite elongation. And in retinal photoreceptor cells, SARM1 complexes with Na/K ATPase to create a cell surface receptor for retinoschisin. Human SARM1 is 724 amino acids (aa) in length. It contains an N-terminal polybasic motif (aa 1-20) and a Gly-rich region (aa 22-90) that may anchor the molecule to intracellular membranes. It also possesses two SAM domains (aa 412-548) plus a TIR region (aa 559-657) that appears to interact with TIRF. Proteolytic cleavage products of 35 kDa and 30 kDa have been described. There is one splice variant that shows a 72 aa substitution for aa 1-106. Over aa 556-724, human SARM1 shares 94% aa identity with mouse SARM1.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956