

#73956 Store at -20C

SLP-2 (D5N4E) Rabbit mAb

Cell Signaling
TECHNOLOGY®Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IF-IC	H	Endogenous	40	Rabbit IgG	#Q9UJZ1	30968

Product Usage Information

Application

Western Blotting

Dilution

1:1000

Immunofluorescence (Immunocytochemistry)

1:800

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity / Sensitivity

SLP-2 (D5N4E) Rabbit mAb recognizes endogenous levels of total SLP-2 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu346 of human SLP-2 protein.

Background

Stomatin-like protein 2 (SLP-2 and also known as STOML2) is a lipid-anchored mitochondrial protein that is part of a large protein complex that regulates mitochondrial biogenesis and function. Proteomic studies identified SLP-2 as a widely expressed mitochondria-enriched protein (1). As a member of both the stomatin family and stomatin-prohibitin-flotillin-HflC/K (SPFH) superfamily of proteins, SLP-2 forms large hetero-oligomeric complexes with other mitochondrial proteins, including prohibitin, mitofusin 2, and cardiolipin (2, 3). SLP-2 contains a highly conserved SPFH domain that mediates its ability to associate with the mitochondrial inner membrane and form specialized membrane microdomains. As an inner membrane organizer of other mitochondrial proteins, SLP-2 performs multiple mitochondrial functions, including regulation of mitochondrial biogenesis, energy/calcium homeostasis, translation, and mitochondrial-mediated cellular stress responses (3, 4, 5, 6, 7, 8). Enhanced SLP-2 expression is also associated with several human cancers, including gallbladder, rectal, and gastric cancer (9, 10, 11).

Background References

1. Da Cruz, S. et al. (2003) *J Biol Chem* 278, 41566-71.
2. Hájek, P. et al. (2007) *J Biol Chem* 282, 5670-81.
3. Christie, D.A. et al. (2011) *Mol Cell Biol* 31, 3845-56.
4. Da Cruz, S. et al. (2010) *Cell Calcium* 47, 11-8.
5. Wang, Y. et al. (2009) *Cancer Biol Ther* 8, 1651-8.
6. Christie, D.A. et al. (2012) *J Immunol* 189, 4349-60.
7. Tondera, D. et al. (2009) *EMBO J* 28, 1589-600.
8. Mitsopoulos, P. et al. (2017) *PLoS One* 12, e0179967.
9. Wang, W.X. et al. (2014) *Tumour Biol* 35, 419-23.
10. Liu, Z. et al. (2014) *Oncol Rep* 31, 153-60.
11. Bartolome, A. et al. (2016) *APMIS* 124, 271-7.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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