Revision 4

#14648 Store at -20C

Sec61B (D5Q1W) 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, IP, IF-IC	H M R Mk	Endogenous	12	Rabbit IgG	#P60468	10952

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:100
Immunofluorescence (Immunocytochemistry)	1:200 - 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

Sec61B (D5Q1W) Rabbit mAb recognizes endogenous levels of total Sec61B protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly12 of human Sec61B protein.

Background

Sec61 translocon is a channel complex located on the endoplasmic reticulum (ER) membrane to mediate membrane protein insertion into the organelle (1). There are three components in the complex, Sec61A, Sec61B, and Sec61G (2). Sec61A is the main component of the channel on the ER membrane and directly contacts nascent synthesized polypeptide TMD (transmembrane domain) for insertion (3). Sec61G functions in stablizing the channel (3). In addition to TMD insertion, Sec61 translocon has also been shown to be involved in ER calcium leakage (4,5). Both Bip and calmodulin can inhibit this leakage by their interaction with Sec61A (6,7). Sec61B has no obvious function related to target protein ER membrane insertion, but is involved in other vesicle trafficking processes such as EGFR and Her2 trafficking from the cytosol to nucleus (8,9), Gurken trafficking from Golgi to plasma membrane (10), and copper-transporting ATPase membrane distribution (11).

Background References

1. Shao, S. and Hegde, R.S. (2011) *Annu Rev Cell Dev Biol* 27, 25-56.
2. Hartmann, E. et al. (1994) *Nature* 367, 654-7.
3. Van den Berg, B. et al. (2004) *Nature* 427, 36-44.
4. Flourakis, M. et al. (2006) *FASEB J* 20, 1215-7.
5. Lang, S. et al. (2001) *Channels (Austin)* 5, 228-35.
6. Erdmann, F. et al. (2011) *EMBO J* 30, 17-31.
7. Schäuble, N. et al. (2012) *EMBO J* 31, 3282-96.
8. Wang, Y.N. et al. (2010) *J Biol Chem* 285, 38720-9.
9. Wang, Y.N. et al. (2012) *J Biol Chem* 287, 16869-79.
10. Kelkar, A. and Dobberstein, B. (2009) *BMC Cell Biol* 10, 11.
11. Abada, P.B. et al. (2012) *Mol Pharmacol* 82, 510-20.

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 **IP:** Immunoprecipitation **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

Trademarks and Patents

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.