Revision 4

Store at -20C

#64555

SHANK3 (D5K6R) 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:
W, IP, IF-F	H M R	Endogenous	220	Rabbit IgG	#Q9BYB0	85358

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50
Immunofluorescence (Frozen)	1:400

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.

For a carrier free (BSA and azide free) version of this product see product #84654.

Specificity/Sensitivity

SHANK3 (D5K6R) Rabbit mAb recognizes endogenous levels of total SHANK3 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ile1210 of human SHANK3 protein.

Background

The SHANK family proteins, also known as proline-rich synapse-associated proteins, consist of SHANK1, SHANK2, and SHANK3. SHANK proteins act as scaffolds at the neuronal post-synaptic density (PSD) (1), where they play a critical role in PSD assembly of excitatory synapses during development (2). While recruitment of SHANK proteins to the synapse is independent of their interaction with Homer (3), proper synaptic targeting of SHANK1 is mediated by interactions between its PDZ domain and PSD proteins (4). At the synapse, SHANK proteins interact with NMDA receptors and metabotropic glutamate receptor complexes (5). Research studies have proposed the involvement of SHANK proteins in autism and neurodegenerative diseases (1).

Background References

1. Grabrucker, A.M. et al. (2011) *Trends Cell Biol* 21, 594-603.
2. Boeckers, T.M. et al. (1999) *J Neurosci* 19, 6506-18.
3. Boeckers, T.M. et al. (2005) *J Neurochem* 92, 519-24.
4. Sala, C. et al. (2001) *Neuron* 31, 115-30.
5. Boeckers, T.M. et al. (2002) *J Neurochem* 81, 903-10.

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 BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation **IF-F:** Immunofluorescence (Frozen)

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

Trademarks and Patents

Limited Uses

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.