Revision 1

#14326 Store at -20C

TRIM5α (D6Z8L) 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	H Mk	Endogenous	56	Rabbit IgG	#Q9C035	85363

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50

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

TRIM5α (D6Z8L) Rabbit mAb recognizes endogenous levels of total TRIM5α protein. This antibody does not react with human TRIM5β and is not predicted to react with other human TRIM5 isoforms based on the location of the antigen.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro395 of human TRIM5α protein.

Background

TRIM5α is a retroviral restriction factor that was originally identified as an HIV restriction factor in Old World monkeys (1). The restriction specificity of TRIM5α varies between species (2). Human TRIM5α only weakly restricts HIV, but efficiently restricts N-tropic murine leukemia virus (N-MLV) (1-3). TRIM5α is composed of a tripartite motif containing RING, B-box 2, and coiled-coil domains, and a B30.2/SPRY domain (4). A 13 amino acid stretch of the B30.2/SPRY domain containing multiple positively charged residues was found to be essential for viral restriction and responsible for variations across species in restriction specificity (4,5). TRIM5α blocks viral infection by interacting with the incoming viral capsid and promoting its premature disassembly (1,6,7). In addition, TRIM5α, together with UBC13-UEV1A, promotes innate immune signaling by catalyzing the synthesis of K63-linked ubiquitin chains that activate TAK1, AP-1, and NF-κB (8).

Background References

1. Stremlau, M. et al. (2004) *Nature* 427, 848-53.
2. Hatziioannou, T. et al. (2004) *Proc Natl Acad Sci U S A* 101, 10774-9.
3. Yap, M.W. et al. (2004) *Proc Natl Acad Sci U S A* 101, 10786-91.
4. Javanbakht, H. et al. (2005) *J Biol Chem* 280, 26933-40.
5. Sawyer, S.L. et al. (2005) *Proc Natl Acad Sci U S A* 102, 2832-7.
6. Stremlau, M. et al. (2006) *Proc Natl Acad Sci U S A* 103, 5514-9.
7. Chatterji, U. et al. (2006) *J Biol Chem* 281, 37025-33.
8. Pertel, T. et al. (2011) *Nature* 472, 361-5.

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

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.