

#3967 Store at -20C

TRRAP (P2032) Antibody


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:	UniProt ID:	Entrez-Gene Id:
WB	H M Mk	Endogenous	434	Rabbit	#Q9Y4A5	8295

Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

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

Specificity / Sensitivity

TRRAP (P2032) Antibody detects endogenous levels of total TRRAP protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the human TRRAP protein. Antibodies are purified by peptide affinity chromatography.

Background

Transformation/transcription domain-associated protein (TRRAP) is a highly conserved 434 kDa protein found in various multiprotein complexes, such as SAGA, PCAF, NuA4 and TIP60, which contain histone acetyltransferase (HAT) activity (1-4). TRRAP functions as an adaptor protein by binding directly to the transactivation domains of transcriptional activator proteins and facilitating the recruitment of HAT complexes to acetylate histone proteins and activate transcription (1-5). TRRAP is required for the transcriptional activation and cell transformation activities of c-Myc, E2F1, E2F4, p53 and the adenovirus E1A proteins (1,6,7). TRRAP is also essential in early development and is required at the mitotic checkpoint and for normal cell cycle progression (8,9). In addition, TRRAP has been shown to function in DNA repair. As part of the TIP60 complex, TRRAP is required for the acetylation of histone H4 at double-stranded DNA breaks and subsequent DNA repair by homologous recombination (10). In addition, TRRAP associates with the MRN (MRE11, RAD50, NBS1) complex, which lacks intrinsic HAT activity yet functions in the sensing and subsequent repair of double-stranded breaks by non-homologous DNA end-joining (11). TRRAP shows significant homology to the PI-3 kinase domain of the ATM family of kinases; however, amino acids that map to the catalytic site of the kinase domain are not conserved in TRRAP (1).

Background References

- McMahon, S.B. et al. (1998) *Cell* 94, 363-374.
- Grant, P.A. et al. (1998) *Mol. Cell* 2, 863-867.
- Ikura, T. et al. (2000) *Cell* 102, 463-473.
- Allard, S. et al. (1999) *EMBO J.* 18, 5108-5119.
- McMahon, S.B. et al. (2000) *Mol. Cell. Biol.* 20, 556-562.
- Deleu, L. et al. (2001) *Oncogene* 20, 8270-8275.
- Ard, P.G. et al. (2002) *Mol. Cell. Biol.* 22, 5650-5661.
- Herceg, Z. et al. (2001) *Nat. Genet.* 29, 206-211.
- Li, H. et al. (2004) *EMBO J.* 23, 4824-4834.
- Murr, R. et al. (2006) *Nat. Cell Biol.* 8, 91-99.
- Robert, F. et al. (2006) *Mol. Cell. Biol.* 26, 402-412.

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

WB: Western Blotting

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

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

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.