

#8052 Store at -20C

TCF11/NRF1 (D5B10) 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	H M Mk	Endogenous	120-140	Rabbit IgG	#Q14494	4779

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, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity / Sensitivity

TCF11/NRF1 (D5B10) Rabbit mAb recognizes endogenous levels of total TCF11 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly129 of human TCF11 protein.

Background

Transcription factor 11 (TCF11) is a basic leucine zipper transcription factor. It is also referred to as Nuclear factor E2-related factor 1 (NRF1). TCF11 was initially reported to activate erythroid-specific, human globin gene expression (1). It plays an essential role during embryonic development (2). It also associates with other transcription factors, such as Jun proteins, to transcriptionally control antioxidant response element (ARE)-mediated expression in response to antioxidants and xenobiotics (3-5). TCF11 has been shown to regulate proteasomal degradation and mediate the proteasome recovery pathway after proteasome inhibition (6,7). TCF11 is ubiquitously expressed (8) and several isoforms have been reported. The 120 kDa form exists in the endoplasmic reticulum (ER) membrane under normal conditions. Upon proteasome inhibition, TCF11 translocates to the nucleus (7). The 65 kDa N-terminal-truncated form is constitutively localized to the nucleus (9,10). TCF11 protein levels are regulated by ubiquitination and proteasomal-mediated degradation (11); proteasome inhibitors stabilize TCF11.

Background References

1. Caterina, J.J. et al. (1994) *Nucleic Acids Res* 22, 2383-91.
2. Murphy, P. and Kolstø, A. (2000) *Mech Dev* 97, 141-8.
3. Johnsen, O. et al. (1998) *Nucleic Acids Res* 26, 512-20.
4. Venugopal, R. and Jaiswal, A.K. (1998) *Oncogene* 17, 3145-56.
5. Kwong, M. et al. (1999) *J Biol Chem* 274, 37491-8.
6. Radhakrishnan, S.K. et al. (2010) *Mol Cell* 38, 17-28.
7. Steffen, J. et al. (2010) *Mol Cell* 40, 147-58.
8. Chan, J.Y. et al. (1993) *Proc Natl Acad Sci USA* 90, 11371-5.
9. Wang, W. and Chan, J.Y. (2006) *J Biol Chem* 281, 19676-87.
10. Wang, W. et al. (2007) *J Biol Chem* 282, 24670-8.
11. Chepelev, N.L. et al. (2011) *PLoS One* 6, e29167.

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.