

**TCF11/NRF1 (D5B10) Rabbit mAb**

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	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**

**W:** Western Blotting

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **Mk:** Monkey

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