#2286 Store at –20°C

LEF1 (C18A7) Rabbit mAb

Cell Signaling TECHNOLOGY®

✓ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

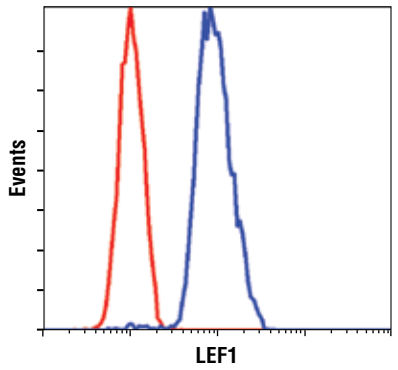
Entrez-Gene ID #51176
Swiss-Prot Acc. #Q9UJU2

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP, F Endogenous	H, M	25-58 kDa	Rabbit IgG**

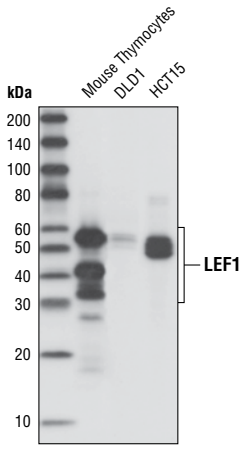
Background: LEF1 and TCF are members of the high mobility group (HMG) DNA binding protein family of transcription factors which consists of the following: Lymphoid enhancer factor 1 (LEF1), T Cell Factor 1 (TCF1), TCF3 and TCF4 (1). LEF1 and TCF1 were originally identified as important factors regulating early lymphoid development (2) that act downstream in Wnt signaling. LEF1 and TCF bind to Wnt response elements to provide docking sites for β-catenin, which translocates to the nucleus to promote the transcription of target genes upon activation of Wnt signaling (3). LEF1 and TCF proteins are dynamically expressed during development and aberrant activation of the Wnt signaling pathway is involved in many types of cancers including colon cancer (4,5).

LEF1 has several isoforms due to alternative splicing. LEF1 also has an alternative promoter that is preferentially active in lymphocytes. The isoforms generated by this alternative promoter have no amino-terminal β-catenin binding domain, therefore, they may function in a dominant negative manner (6-8).

Specificity/Sensitivity: LEF1 (C18A7) Rabbit mAb detects endogenous level of total LEF1 proteins, including the dominant negative forms due to the usage of alternative promoter.



Flow cytometric analysis of Jurkat cells, using LEF1 (C18A7) Rabbit mAb (blue) compared to a nonspecific negative control antibody (red).



Western blot analysis of total cell lysates from mouse thymocytes, DLD1 and HCT15 cells, using LEF1 (C18A7) Rabbit mAb.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val282 of human LEF1.

Background References:

(1) Waterman, M.L. (2004) *Cancer Metastasis Rev.* 23, 41-52.
(2) Schilham, M.W. and Clevers, H. (1998) *Semin. Immunol.* 10, 127-132.
(3) Brantjes, H. et al. (2002) *Biol. Chem.* 383, 255-261.
(4) Reya, T. and Clevers, H. (2005) *Nature* 434, 843-850.
(5) Logan, C.Y. and Nusse, R. (2004) *Annu. Rev. Cell Dev. Biol.* 20, 781-810.
(6) Hovanes, K. et al. (2000) *Nucleic Acids Res* 28, 1994-2003.
(7) Hovanes, K. et al. (2001) *Nat Genet* 28, 53-7.
(8) Kobielak, A. et al. (2001) *Acta Biochim Pol* 48, 221-6.

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.*

***Species cross-reactivity is determined by western blot.**

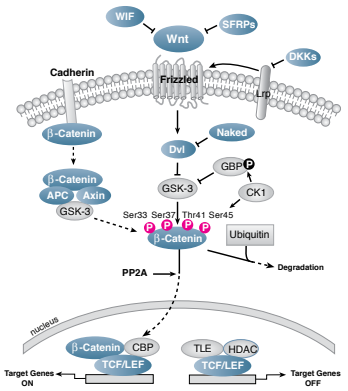
****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:50
Flow Cytometry	1:100

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.



IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **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 **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.

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