Revision 4

Store at -20C

#50565

LRF/Pokemon (D7U2O) Rabbit mAb

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IHC-P, IF-IC, FC-FP	H M R Mk	Endogenous	75	Rabbit IgG	#O95365	51341

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunohistochemistry (Paraffin)	1:50
Immunofluorescence (Immunocytochemistry)	1:100
Flow Cytometry (Fixed/Permeabilized)	1:400

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.

For a carrier free (BSA and azide free) version of this product see product #27432.

Specificity/Sensitivity

LRF/Pokemon (D7U2O) Rabbit mAb recognizes endogenous levels of total LRF/Pokemon protein. This antibody cross-reacts with a 44 kDa protein of unknown origin.

Source / Purification

Monoclonal antibody is produced by immunizing animals with recombinant LRF/Pokemon protein.

Background

Zinc finger and BTB domain-containing protein 7A (LRF, Pokemon, FBI1) is a transcriptional repressor encoded by the *ZBTB7A* gene that belongs to the POK (POZ and *Kruppel*)/ZBTB (zinc finger and BTB) family (1). LRF is broadly expressed with elevated expression in a variety of cancers relative to normal tissues, including non-small cell lung cancer, breast cancer, ovarian cancer, prostate cancer, and hepatocellular carcinoma (1-8). Research studies suggest that LRF acts as an oncogene through various mechanisms including repression of the tumor suppressors ARF and Rb, and repression of the cell cycle arrest factor p21Cip1 (9-11). The LRF transcription factor plays key roles during several stages of hematopoiesis including promoting lymphoid progenitor cells to commit to B cell differentiation by repressing T cell-promoting Notch signals, and promoting cell survival during terminal erythroid differentiation through suppression of the proapoptotic factor Bim (12,13).

Background References

1. Lee, S.U. and Maeda, T. (2012) *Immunol Rev* 247, 107-19.
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3. Zhao, Z.H. et al. (2008) *Lung Cancer* 62, 113-9.
4. Qu, H. et al. (2010) *Cancer Invest* 28, 672-8.
5. Aggarwal, A. et al. (2010) *Exp Mol Pathol* 89, 140-8.
6. Jiang, L. et al. (2010) *Mol Cancer* 9, 318.
7. Aggarwal, H. et al. (2011) *Exp Mol Pathol* 90, 226-30.
8. Fang, F. et al. (2012) *Cancer* 118, 134-46.
9. Maeda, T. et al. (2005) *Nature* 433, 278-85.
10. Jeon, B.N. et al. (2008) *J Biol Chem* 283, 33199-210.
11. Choi, W.I. et al. (2009) *J Biol Chem* 284, 12633-44.
12. Maeda, T. et al. (2007) *Science* 316, 860-6.
13. Maeda, T. et al. (2009) *Dev Cell* 17, 527-40.

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 **IHC-P:** Immunohistochemistry (Paraffin) **IF-IC:** Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

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

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