

#4153 Store at -20°C

EGR1 (15F7) Rabbit mAb



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.

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP, IHC-P, IF-IC, ChIP Endogenous	H, M, R, (B)	75 kDa	Rabbit IgG**

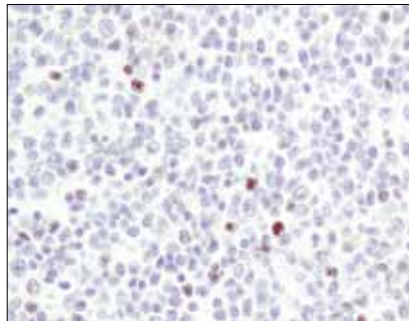
Background: EGR family members are transcriptional factors with 3 repetitive Zinc finger DNA binding domains which bind to EGR response element (ER) and regulate target gene expression (1). The expression of EGR family members is induced by growth factors (1). Among the family members, EGR1 expression has been specifically shown to be induced by NGF (1,2). EGR1 expression further activates transcription of other signaling molecules including CDK5 and tyrosine hydroxylase to exert long term effects on neural cell growth and differentiation (2,3).

Specificity/Sensitivity: EGR1 (15F7) Rabbit mAb detects endogenous levels of total EGR1 protein.

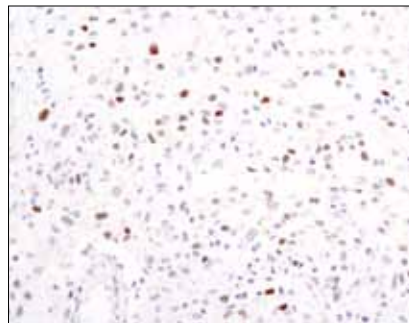
Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the amino terminus of the sequence of human EGR1.

Background References:

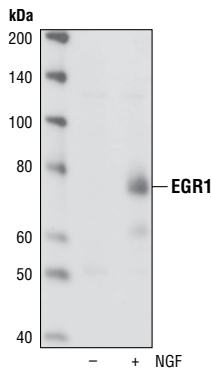
- O'Donovan, K.J. et al. (1999) *Trends Neurosci.* 22, 167–173.
- Harada, T. et al. (2001) *Nat. Cell Biol.* 3, 453–459.
- Papanikolaou, N.A. and Sabban, E.L. (2000) *J. Biol. Chem.* 275, 26683–26689.



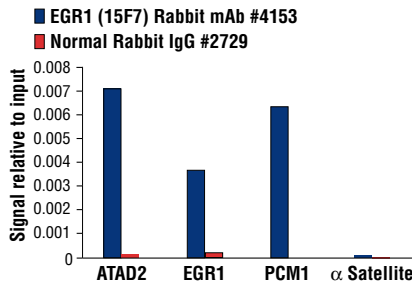
Immunohistochemical analysis of paraffin-embedded human Non-Hodgkin's lymphoma, using EGR1 (15F7) Rabbit mAb.



Immunohistochemical analysis of paraffin-embedded human glioblastoma, showing nuclear localization, using EGR1 (15F7) Rabbit mAb.



Western analysis of extracts from serum starved PC12 cells, untreated or NGF-treated (100 ng/ml NGF for 2 hours), using EGR1 (15F7) Rabbit mAb.



Entrez-Gene ID #1958
Swiss-Prot Acc. #P18146

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.

***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
Immunohistochemistry (Paraffin)	1:50†
Unmasking buffer:	Citrate
Antibody diluent:	SignalStain® Antibody Diluent #8112
Detection reagent:	SignalStain® Boost (HRP, Rabbit) #8114
†Optimal IHC dilutions determined using SignalStain® Boost IHC Detection Reagent.	
Immunofluorescence (IF-IC)	1:800
Chromatin IP	1:50

For application specific protocols please see:
www.cellsignaling.com/support/protocols/
Please visit www.cellsignaling.com for a complete listing of recommended companion products.

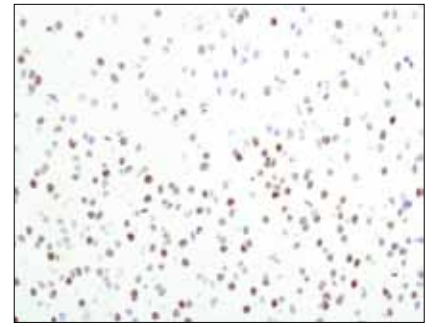
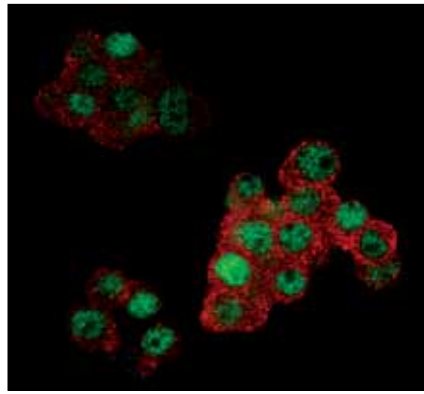
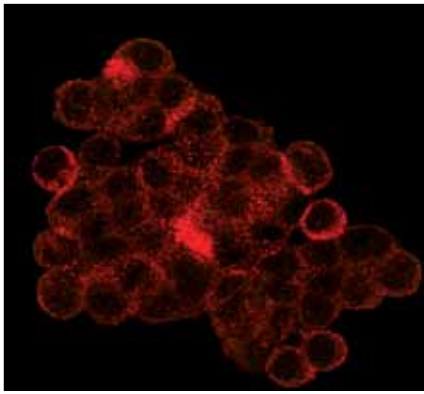
◀ Chromatin immunoprecipitations were performed with cross-linked chromatin from 4×10^6 THP-1 cells treated with TPA (12-O-Tetradecanoylphorbol-13-Acetate) #4174 (30ng/ml) overnight and either 10 µl of EGR1 (15F7) Rabbit mAb or 2 µl of Normal Rabbit IgG #2729 using SimpleChIP™ Enzymatic Chromatin IP Kit (Magnetic Beads) #9003. The enriched DNA was quantified by real-time PCR using human ATAD2 promoter primers, SimpleChIP® Human EGR1 Promoter Primers #5549, human PCM1 promoter primers, and SimpleChIP™ Human α-Satellite Repeat Primers #4486. The amount of immunoprecipitated DNA in each sample is represented as signal relative to the total amount of input chromatin, which is equivalent to one.

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.

Rabbit monoclonal antibody is produced under license (granting certain rights including those under U. S. Patents No. 5,675,063 and 7,429,487) from Epitomics, Inc.

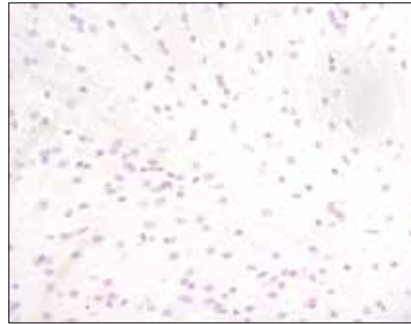
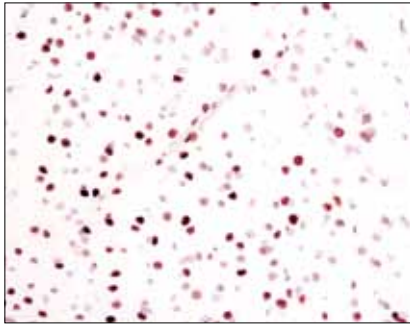
Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 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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Immunohistochemical analysis of paraffin-embedded mouse brain, using EGR1 (15F7) Rabbit mAb.

Confocal immunofluorescent analysis of dissociated PC12 cells either untreated (left) or NGF-treated for 2 hours (right), using EGR1 (15F7) Rabbit mAb (green) and MEK1/2 (L38C12) Mouse mAb #4694 (red).



Immunohistochemical analysis of paraffin-embedded mouse brain using EGR1 (15F7) Rabbit mAb #4153 in the presence of control peptide (left) or EGR1 Blocking Peptide (right).