10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-FOX3 (NeuN) Antibody

Our Anti-FOX3 (NeuN) primary antibody from PhosphoSolutions is mouse monoclonal. It detects bovine,
Catalog # AN1387

Product Information

Application	WB, IHC, ICC
Primary Accession	A6NFN3
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Clone Names	1B7
Calculated MW	33873

Additional Information

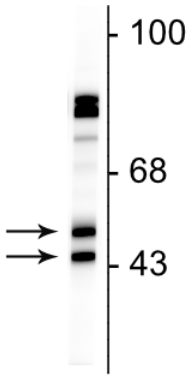
Gene ID	146713
Other Names	FLJ56884 antibody, FLJ58356 antibody, Fox-1 homolog C antibody, fox1 homolog C antibody, Fox 3 antibody, FOX3NeuN antibody, hexaribonucleotide binding protein 3 antibody, HRNBP3 antibody, NeuN antibody, NEUN antibody, neuronal nuclei antibody, Rbfox3 antibody, RFOX3_HUMAN antibody, RNA binding protein fox-1 homolog 3 antibody, RNA binding protein fox 1 homolog (C. elegans) 3 antibody
Target/Specificity	FOX3, also known as NeuN and hexaribonucleotide binding protein 3, is a neuron-specific RNA binding nuclear protein involved in the regulation of pre-mRNA alternative splicing (Kim et al., 2009). FOX3 dependent alternative splicing of Numb has recently been shown to play an important role in the progression of neuronal differentiation during vertebrate development (Kim et al., 2013).
Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A
Format	Protein G Purified
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-FOX3 (NeuN) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

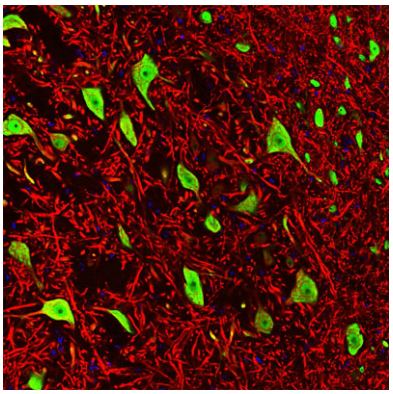
FOX3, also known as NeuN and hexaribonucleotide binding protein 3, is a neuron-specific RNA binding nuclear protein involved in the regulation of pre-mRNA alternative splicing (Kim et al., 2009). FOX3

dependent alternative splicing of Numb has recently been shown to play an important role in the progression of neuronal differentiation during vertebrate development (Kim et al., 2013).

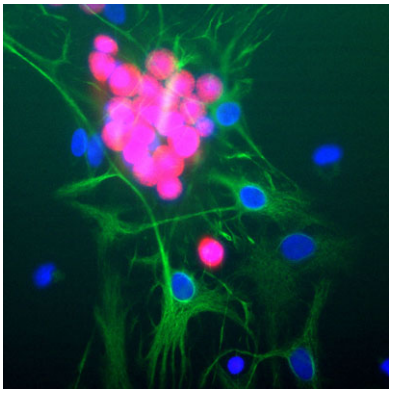
Images



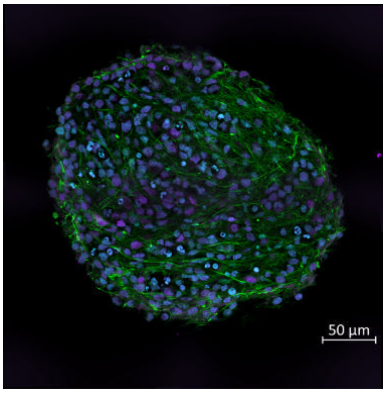
Western blot of rat cortical lysate showing specific immunolabeling of the ~46/48 kDa FOX3 protein.



Immunofluorescence of a section of rat brain stem co-labeled with Anti-FOX3(cat. AN1387, green, 1:1000) and Anti-MAP2 (cat. 1100-MAP2, red, 1:5000). The Anti-FOX3 specifically labels the nuclei and the proximal cytoplasm of neuronal cells while the Anti-MAP2 labels dendrites and overlaps with FOX3 labeling the perikarya of neurons. The blue is DAPI staining of nuclear DNA.

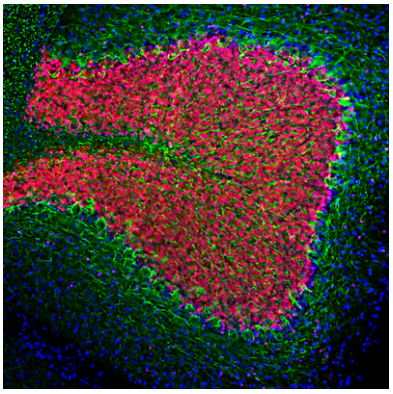


Immunolabeling of cultured rat neurons showing strong nuclear and distal cytoplasmic labeling with anti-FOX3(cat. AN1387, 1:1000, red). The complete absence of astrocyte staining is shown using anti-GFAP (cat. 621-GFAP, 1:1000, green) and nuclear staining was done with DAPI (blue).

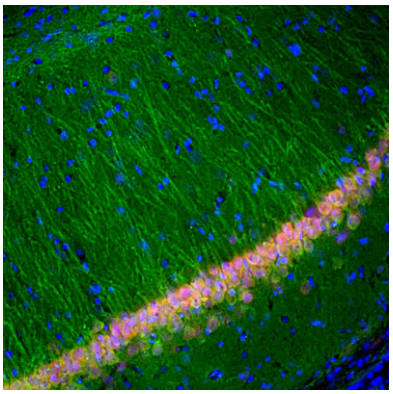


Cell Line: human-derived iPSC cerebral organoids. Neurofilament-H (green), NeuN (purple), DAPI (turquoise). Image courtesy of Caroline Krall, Johns Hopkins University

Immunofluorescence of a section of rat cerebellum showing specific labeling of Neurofilament-L (cat.



1453-NFL, 1:2000, green) and labeling of FOX3/NeuN (cat. AN1387, 1:5000, red). The anti-NFL strongly labels the axons of basket calls and perikarya and processes of neuronal cells. The anti-FOX3/NeuN labels the nuclei and proximal cytoplasm of neurons. The blue is DAPI staining of nuclear DNA.



Immunofluorescence of a section of rat hippocampus showing specific labeling of UCHL1 (cat. 2060-UCHL1, 1:5000, green) in cell bodies and dendrites of neurons, and specific labeling of FOX3 (red). The blue is DAPI staining of nuclear DNA.