

### Anti-FOX3 (NeuN) Antibody

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

### **Specification**

## Anti-FOX3 (NeuN) Antibody - Product Information

Application WB, IHC **Primary Accession** A6NFN3

Bovine, Chicken Reactivity

Host Mouse Clonality **Monoclonal** Isotype IgG2b

Calculated MW 33873

## Anti-FOX3 (NeuN) Antibody - 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

### **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

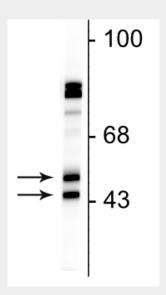


## Anti-FOX3 (NeuN) Antibody - Protocols

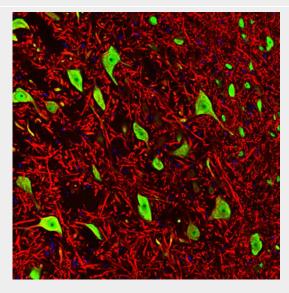
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Anti-FOX3 (NeuN) Antibody - Images



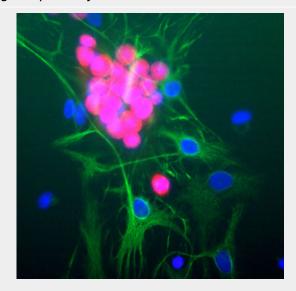
Western blot of rat cortical lysate showing specific immunolabeling of the  $\sim\!46/48$  kDa FOX3 protein.



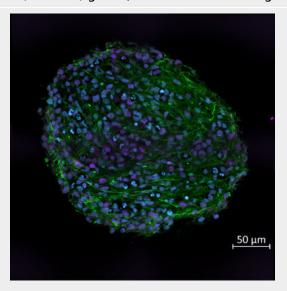
Immunofluorescence of a section of rat brain stem co-labeled with Anti-FOX3(cat. 583-FOX3, green, 1:1000) and Anti-MAP2 (cat. 1100-MAP2, red, 1:5000). The Anti-FOX3 specifically labels the



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.

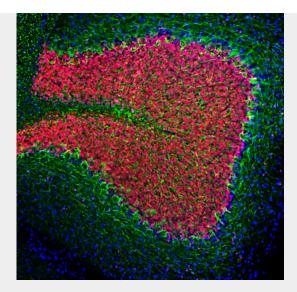


Immunolabeling of cultured rat neurons showing strong nuclear and distal cytoplasmic labeling with anti-FOX3(cat. 583-FOX3, 1:1000, red). The complete absence of astrocyte staining is shown using anti-GFAP (cat. 621-GFAP, 1:1000, green) and nuclear staining was done with DAPI (blue).

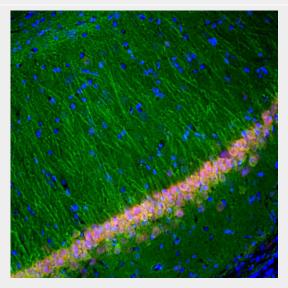


Cell Line: human-derived iPSC cerebral organoids. Neurofilament-H (green), NeuN (purple), DAPI (turquoise). Image courtesy of Caroline Krall, Johns Hopkins University





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. 583-FOX3, 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.

# Anti-FOX3 (NeuN) Antibody - Background

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