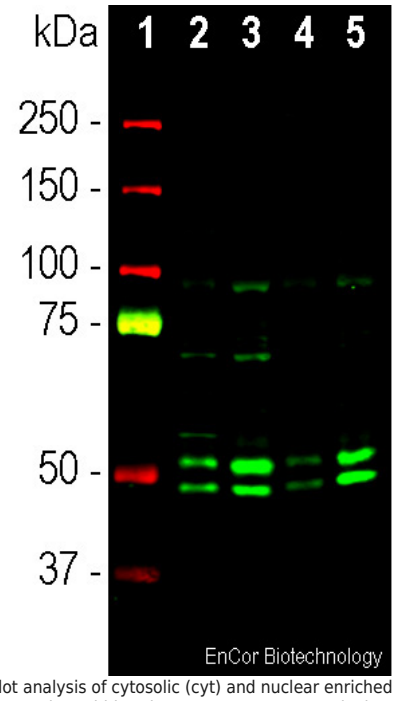
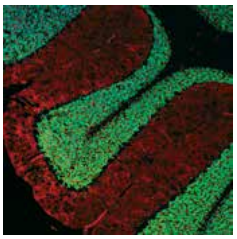
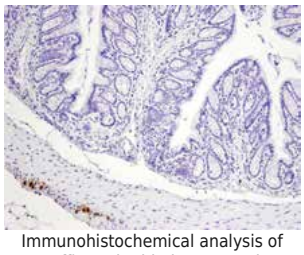
Product name:	NeuN-FOX3
Cat number:	MAB-94416
Conjugate:	Unconjugated
Size:	100 UG
Clone:	D4G40
Concentration:	1mg/ml
Host:	Rb
Isotype:	IgG
Immunogen:	recombinant protein specific to theamino terminus of human NeuN protein.
Reactivity:	Hu, Ms, Rt
Applications:	WB: 1:1000, ICC, IF: 1:50, IHC: 1:400
Molecular Weight:	46-55 kDa
Purification:	Purified
Form:	Liquid
Storage:	4°C for short term and -20°C for longer term
Background:	Neuronal nuclei (NeuN, Fox-3, RBFOX3) is a nuclear protein expressed in most post-mitotic neurons of the central and peripheral nervous systems. NeuN is not detected in Purkinje cells, sympathetic ganglion cells, Cajal-Retzius cells, INL retinal cells, inferior olivary, and dentate nucleus neurons (1). This neuronal protein was originally identified by immunoreactivity with a monoclonal antibody also called NeuN. Using MS-analysis, NeuN was later identified as the Fox-3 gene product. Fox-3 contains an RNA recognition motif and functions as a splicing regulator (2). Fox-3 regulates alternative splicing of NumB, promoting neuronal differentiation during development (3).



Western blot analysis of cytosolic (cyt) and nuclear enriched (nuc) fractions of whole brain lysates using rabbit pAb to FOX3/ NeuN N-terminal peptide, FOX3-nt, dilution 1:1,000 in green: [1] protein molecular weight standard (red), [2] rat cyt, [3] rat nuc, [4] mouse cyt, and [5] mouse nuc lysate. Two bands of 46 and 48kDa correspond to the two alternate transcripts of the FOX3/NeuN protein. Western blotting was performed under non reducing conditions.



Confocal immunofluorescent analysis of mouse cerebellum using NeuN (D4G4O) Rabbit mAb (green). Actin filaments were labeled with DyLight™ 554 Phalloidin (red). Blue pseudocolor = DRAQ5®4 (fluorescent DNA dye).



Immunohistochemical analysis of paraffin-embedded mouse colon (myenteric plexus) using NeuN (D4G4O) Rabbit mAb.