

Anti-Fibrillarin Antibody

Our Anti-Fibrillarin primary antibody from PhosphoSolutions is mouse monoclonal. It detects human, m
Catalog # AN1384

Product Information

Application	WB, IHC, ICC
Primary Accession	P15646
Reactivity	Pig
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	38F3
Calculated MW	34465

Additional Information

Gene ID	851548
Other Names	34 kD nucleolar scleroderma antigen antibody, 34 kDa nucleolar scleroderma antigen antibody, Fbl antibody, FBRL_HUMAN antibody, FIB antibody, FIB1 antibody, FLRN antibody, Histone-glutamine methyltransferase antibody, Nop1p antibody, RNA U3 small nucleolar interacting protein 1 antibody, RNU3IP1 antibody, rRNA 2' O methyltransferase fibrillarin antibody, rRNA 2'-O-methyltransferase fibrillarin antibody

Target/Specificity	Nop1p was originally identified as a nucleolar protein of bakers yeast, <i>Saccharomyces cerevisiae</i> . The Nop1p protein is 327 amino acids in size (34.5kDa), is essential for yeast viability, and is localized in the nucleoli (1). The systematic name for <i>S. cerevisiae</i> Nop1 is YDL014W, and it is now known to be part of the small subunit processome complex, involved in the processing of pre-18S ribosomal RNA. Nop1p is the yeast homologue of a protein found in all eukaryotes and archaea generally called fibrillarin (2). Fibrillarin/Nop1p is extraordinarily conserved, so that the yeast and human proteins are 67% identical, and the human protein can functionally replace the yeast protein. Patients with the autoimmune disease scleroderma often have strong circulating autoantibodies to a ~34 kDa protein which was subsequently found to be fibrillarin. Recent studies show that knock-out of the fibrillarin gene in mice results in embryonic lethality, although mice with only one functional fibrillarin/Nop1p gene were viable (3). This antibody is becoming widely used as a convenient marker for nucleoli in a wide variety of species (e.g. 4-6).
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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-Fibrillarin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

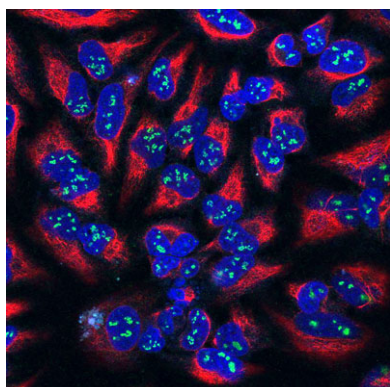
Shipping

Blue Ice

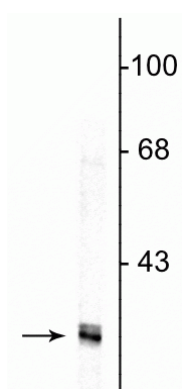
Background

Nop1p was originally identified as a nucleolar protein of bakers yeast, *Saccharomyces cerevisiae*. The Nop1p protein is 327 amino acids in size (34.5kDa), is essential for yeast viability, and is localized in the nucleoli (1). The systematic name for *S. cerevisiae* Nop1 is YDL014W, and it is now known to be part of the small subunit processome complex, involved in the processing of pre-18S ribosomal RNA. Nop1p is the yeast homologue of a protein found in all eukaryotes and archaea generally called fibrillarin (2). Fibrillarin/Nop1p is extraordinarily conserved, so that the yeast and human proteins are 67% identical, and the human protein can functionally replace the yeast protein. Patients with the autoimmune disease scleroderma often have strong circulating autoantibodies to a ~34 kDa protein which was subsequently found to be fibrillarin. Recent studies show that knock-out of the fibrillarin gene in mice results in embryonic lethality, although mice with only one functional fibrillarin/Nop1p gene were viable (3). This antibody is becoming widely used as a convenient marker for nucleoli in a wide variety of species (e.g. 4-6).

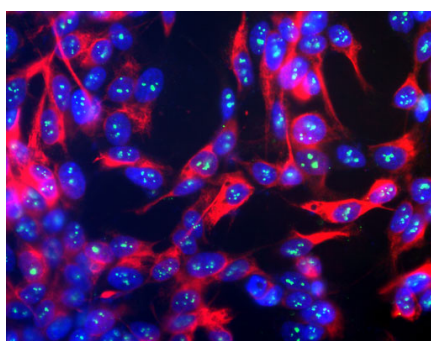
Images



High magnification confocal image of HeLa cells showing strong, prominent labeling of the nucleoli in the nucleus with Anti-Fibrillarin (cat. AN1384, 1:100, green), colabeled with Anti-Vimentin (cat. 2105-VIM, red, 1:1000) showing the cytoplasmic intermediated filaments, and nuclear staining was done with DAPI (blue).



Western blot of HeLa cell lysate showing specific immunolabeling of the ~34 kDa fibrillarin protein.



Immunofluorescence of human neuroblastoma SH-SY5Y cells showing strong, prominent labeling of the nucleoli in the nucleus with Anti-Fibrillarin (cat. AN1384, 1:500, green), and nuclear staining was done with DAPI (blue) which makes the fibrillarin marker appear pale blue.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.