

## Product datasheet for **AM08249PU-N**

### **NOP1 Mouse Monoclonal Antibody [Clone ID: 38F3]**

#### **Product data:**

|                       |   |
|-----------------------|---|
| Product Type:         | Primary Antibodies  |
| Clone Name:           | 38F3  |
| Applications:         | IF, IHC, WB   |
| Recommended Dilution: | <b>Western Blot:</b> 1/1,000.<br><b>Immunofluorescence:</b> 1/500.<br><b>Immunohistochemistry.</b>  |
| Reactivity:           | C. elegans, Drosophila, Human, Plant, Rat   |
| Host:                 | Mouse   |
| Isotype:              | IgG1  |
| Clonality:            | Monoclonal  |
| Immunogen:            | Yeast nuclear preparations.   |
| Specificity:          | Specific for the ~34kDa Fibrillarin /Nop1p protein.<br>This antibody is becoming widely used as a convenient marker for nucleoli in a wide variety of species (e.g. 4-6). |
| Formulation:          | State: Ig Fraction<br>State: Liquid Total IgG fraction<br>Preservative: 10 mM Sodium Azide  |
| Conjugation:          | Unconjugated  |
| Storage:              | Upon receipt, store (in aliquots) at -20°C to -80°C.<br>Avoid repeated freezing and thawing.  |
| Stability:            | Shelf life: one year from despatch.   |
| Database Link:        | <a href="#">P15646</a>  |



[View online »](#)

**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 archea 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 ~34kDa 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).

**Synonyms:**

FIB1, FLRN, Fibrillarin, RNU3IP1, NOP1, LOT3, Nucleolar protein 1, Nucleolar Marker

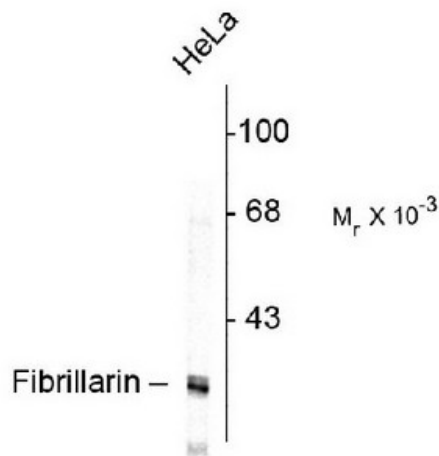
**Product images:**


Figure 1. Western blot of HeLa lysate showing specific immunolabeling of the ~ 34k Fibrillarin protein.

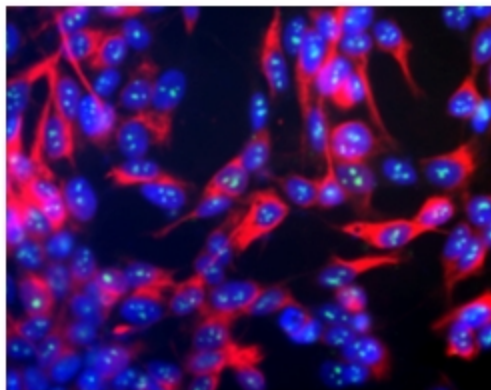


Figure 2. Human SH-SY5Y cells stained with mouse-anti-Fibrillarin, showing prominent specular nucleolar staining. The nuclei are counter stained with blue DAPI DNA stain, so these spots appear very pale blue.