

Alignment of fibrillarin/Nop1p sequences from multiple species. As is obvious the molecule is extremely highly conserved, particularly in the fibrillarin domain, which spans from amino acid 88 to 315 in the human sequence. *Drosophila* refers to the sequence from *D. melanogaster, Caenorhabditis* that from *C. elegans* and *Saccharomyces* is from *S. cerevisiae*. Sequences were downloaded from the Homologene site at the NIH. EnCor's antibody MCA-38F3 was originally raised against *S. cerevisiae* nuclear preparations and subsequently found to bind NOP1p, the yeast fibrillarin homologue. The EnCor MCA-4A4 antibody was raised against recombinant human fibrillarin. The epitopes for these two antibodies are shown above. Epitope mapping was performed by generating a series of staggered 20 amino acid peptides which covered the entire human sequence with 5 amino acid overlap between neighboring peptides. The 2 relevant peptides are highlighted above in yellow, each strongly inhibiting binding of the respective antibody to recombinant human fibrillarin. Since in both cases the previous and next peptides had no apparent inhibitory effect on antibody binding, the central 10 amino acids of each peptide is likely the most significant component of each epitope.