

# EIF1AY Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP13157a

## Specification

## EIF1AY Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>014602</u>

## EIF1AY Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 9086

#### **Other Names**

Eukaryotic translation initiation factor 1A, Y-chromosomal, eIF-1A Y isoform, Eukaryotic translation initiation factor 4C, eIF-4C, EIF1AY

#### Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13157a was selected from the N-term region of EIF1AY. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### EIF1AY Antibody (N-term) Blocking Peptide - Protein Information

### Name EIF1AY

### Function

Component of the 43S pre-initiation complex (43S PIC), which binds to the mRNA cap-proximal region, scans mRNA 5'-untranslated region, and locates the initiation codon. This protein enhances formation of the cap-proximal complex. Together with EIF1, facilitates scanning, start codon recognition, promotion of the assembly of 48S complex at the initiation codon (43S PIC becomes 48S PIC after the start codon is reached), and dissociation of aberrant complexes. After start codon location, together with EIF5B orients the initiator methionine-tRNA in a conformation that allows 60S ribosomal subunit joining to form the 80S initiation complex. Is released after 80S initiation complex formation, just after GTP hydrolysis by EIF5B, and before release of EIF5B. Its globular part is located in the A site of the 40S ribosomal subunit. Its interaction with EIF5 during scanning contribute to the maintenance of EIF1 within the open 43S PIC. In contrast to yeast orthologs, does not bind EIF1.



Cellular Location Cytoplasm.

**Tissue Location** Ubiquitous.

## EIF1AY Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

## EIF1AY Antibody (N-term) Blocking Peptide - Images

### EIF1AY Antibody (N-term) Blocking Peptide - Background

This gene encodes a protein similar to eukaryotictranslation initiation factor 1A (EIF1A). EIF1A is required for thebinding of the 43S complex (a 40S subunit, eIF2/GTP/Met-tRNAi andeIF3) to the 5' end of capped RNA.

## EIF1AY Antibody (N-term) Blocking Peptide - References

Serajee, F.J., et al. J. Child Neurol. 24(10):1258-1261(2009)Lim, J., et al. Cell 125(4):801-814(2006)Fortna, A., et al. PLoS Biol. 2 (7), E207 (2004) :Agate, R.J., et al. Mol. Biol. Evol. 21(2):384-396(2004)Skaletsky, H., et al. Nature 423(6942):825-837(2003)