

# EIF1AX Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP17098c

# Specification

# EIF1AX Antibody (Center) Blocking Peptide - Product Information

Primary Accession

#### <u>P47813</u>

# EIF1AX Antibody (Center) Blocking Peptide - Additional Information

Gene ID 1964

**Other Names** 

Eukaryotic translation initiation factor 1A, X-chromosomal, eIF-1A X isoform, Eukaryotic translation initiation factor 4C, eIF-4C, EIF1AX, EIF1A, EIF4C

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.

# EIF1AX Antibody (Center) Blocking Peptide - Protein Information

Name EIF1AX

Synonyms EIF1A, EIF4C

#### 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 (PubMed:<a href="http://www.uniprot.org/citations/9732867" target="\_blank">9732867</a>). This protein enhances formation of the cap-proximal complex (PubMed:<a

href="http://www.uniprot.org/citations/9732867" target="\_blank">9732867</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/9732867"

target="\_blank">9732867</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/35732735" target=" http://www.uniprot.org/citations/35732735"

target="\_blank">35732735</a>). Is released after 80S initiation complex formation, just after GTP hydrolysis by EIF5B, and before release of EIF5B (PubMed:<a

href="http://www.uniprot.org/citations/35732735" target="\_blank">35732735</a>). Its globular part is located in the A site of the 40S ribosomal subunit (PubMed:<a



href="http://www.uniprot.org/citations/35732735" target="\_blank">35732735</a>). Its
interaction with EIF5 during scanning contribute to the maintenance of EIF1 within the open 43S
PIC (PubMed:<a href="http://www.uniprot.org/citations/24319994"
target="\_blank">24319994</a>). In contrast to yeast orthologs, does not bind EIF1 (PubMed:<a
href="http://www.uniprot.org/citations/24319994" target="\_blank">24319994</a>).

Cellular Location Cytoplasm.

### EIF1AX Antibody (Center) Blocking Peptide - Protocols

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

Blocking Peptides

EIF1AX Antibody (Center) Blocking Peptide - Images

#### EIF1AX Antibody (Center) Blocking Peptide - Background

This gene encodes an essential eukaryotic translationinitiation factor. The protein is required for the binding of the43S complex (a 40S subunit, eIF2/GTP/Met-tRNAi and eIF3) to the 5'end of capped RNA.

#### **EIF1AX Antibody (Center) Blocking Peptide - References**

Elantak, L., et al. J. Mol. Biol. 396(4):1097-1116(2010)Kim, S., et al. Stem Cells Dev. 16(4):537-545(2007)Ross, M.T., et al. Nature 434(7031):325-337(2005)Agate, R.J., et al. Mol. Biol. Evol. 21(2):384-396(2004)Sampath, P., et al. Mol. Cell. Biol. 23(5):1509-1519(2003)