

**Mes-4 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP1965b****Specification**

---

**Mes-4 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q9NH52](#)**Mes-4 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 179824**Other Names**

Histone-lysine N-methyltransferase mes-4, Maternal-effect sterile protein 4, mes-4

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP1965b](/product/products/AP1965b) was selected from the C-term region of human Mes-4. 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.

**Mes-4 Antibody (C-term) Blocking Peptide - Protein Information****Name** mes-4 {ECO:0000312|WormBase:Y2H9A.1}**Function**

Histone methyltransferase. Dimethylates 'Lys-36' of histone H3, a specific tag for epigenetic transcriptional activation. Plays a central role in early development and is responsible for all H3 'Lys- 36' dimethylation until about the 40-cell stage. Indirectly involved in the global inactivation of the X chromosomes in germline cells, possibly by excluding the mes-2-mes-3-mes-6 repressive Polycomb complex from the autosomes (PubMed: [12077420](http://www.uniprot.org/citations/12077420), PubMed: [16968818](http://www.uniprot.org/citations/16968818)). Not related to transcription elongation (PubMed: [12077420](http://www.uniprot.org/citations/12077420), PubMed: [16968818](http://www.uniprot.org/citations/16968818)). Required for small-RNA-induced H3K27 trimethylation (PubMed: [26365259](http://www.uniprot.org/citations/26365259)). May suppress sensitivity to RNAi (PubMed: [16507136](http://www.uniprot.org/citations/16507136)).

target="\_blank">16507136</a>). May regulate the expression of genes required for vulval development (PubMed:<a href="http://www.uniprot.org/citations/16507136" target="\_blank">16507136</a>, PubMed:<a href="http://www.uniprot.org/citations/16710447" target="\_blank">16710447</a>).

#### **Cellular Location**

Nucleus. Chromosome. Note=Specifically associated with the autosomes and with the distal tip of chromosome X. Colocalizes with methylated 'Lys-4' of histone H3

#### **Tissue Location**

In adults, it is predominantly expressed in the germline, and weakly expressed in intestinal cells

### **Mes-4 Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

#### **Mes-4 Antibody (C-term) Blocking Peptide - Images**

#### **Mes-4 Antibody (C-term) Blocking Peptide - Background**

Mes-4 is a histone methyltransferase. This protein dimethylates 'Lys-36' of histone H3, a specific tag for epigenetic transcriptional activation. Mes-4 plays a central role in early development and is responsible for all H3 'Lys-36' dimethylation until about the 40-cell stage. It appears to be indirectly involved in the global inactivation of the X chromosomes in germ line cells, possibly by excluding the mes-2-mes-3-mes-6 repressive Polycomb complex from the autosomes.

#### **Mes-4 Antibody (C-term) Blocking Peptide - References**

Bender L.B., et al. Development. 2006. 133:3907-3917. Fong Y, et al. Science. 2002. 296(5576):2235-8. Korf I, et al. Development. 1998. 125(13):2469-78. Kelly WG, et al. Development. 1998. 125(13):2451-6. Garvin C, et al. Genetics. 1998. 148(1):167-85.