

**Phospho-OCT4(S236) Antibody Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP3724a****Specification**

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**Phospho-OCT4(S236) Antibody Blocking peptide - Product Information**Primary Accession [Q01860](#)**Phospho-OCT4(S236) Antibody Blocking peptide - Additional Information****Gene ID** 5460**Other Names**

POU domain, class 5, transcription factor 1, Octamer-binding protein 3, Oct-3, Octamer-binding protein 4, Oct-4, Octamer-binding transcription factor 3, OTF-3, POU5F1, OCT3, OCT4, OTF3

**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.

**Phospho-OCT4(S236) Antibody Blocking peptide - Protein Information****Name** POU5F1**Synonyms** OCT3, OCT4, OTF3**Function**

Transcription factor that binds to the octamer motif (5'- ATTTGCAT-3'). Forms a trimeric complex with SOX2 or SOX15 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206. Critical for early embryogenesis and for embryonic stem cell pluripotency.

**Cellular Location**

Cytoplasm. Nucleus. Note=Expressed in a diffuse and slightly punctuate pattern. Colocalizes with MAPK8 and MAPK9 in the nucleus. {ECO:0000250|UniProtKB:P20263, ECO:0000269|PubMed:18191611, ECO:0000269|PubMed:19274063, ECO:0000269|PubMed:23024368}

**Tissue Location**

Expressed in developing brain. Highest levels found in specific cell layers of the cortex, the olfactory bulb, the hippocampus and the cerebellum. Low levels of expression in adult tissues.

## **Phospho-OCT4(S236) Antibody Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

## **Phospho-OCT4(S236) Antibody Blocking peptide - Images**

## **Phospho-OCT4(S236) Antibody Blocking peptide - Background**

OCT4 encodes a transcription factor containing a POU homeodomain. This transcription factor plays a role in embryonic development, especially during early embryogenesis, and it is necessary for embryonic stem cell pluripotency. A translocation of this gene with the Ewing's sarcoma gene, t(6;22)(p21;q12), has been linked to tumor formation. Alternative splicing, as well as usage of alternative translation initiation codons, results in multiple isoforms, one of which initiates at a non-AUG (CUG) start codon. Related pseudogenes have been identified on chromosomes 1, 3, 8, 10, and 12.

## **Phospho-OCT4(S236) Antibody Blocking peptide - References**

Narwani, K., et al. In Vitro Cell. Dev. Biol. Anim. 46 (3-4), 309-316 (2010) Raya, A., et al. Nat Protoc 5(4):647-660(2010)Firth, A.L., et al. Am. J. Physiol. Lung Cell Mol. Physiol. 298 (4), L548-L557 (2010)  
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