

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

Synthetic peptide Catalog # BP3724a

## **Specification**

### 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) .