

OCT4 Antibody (Center S236) Blocking Peptide
Synthetic peptide
Catalog # BP17298c**Specification**

OCT4 Antibody (Center S236) Blocking Peptide - Product Information

Primary Accession [Q01860](#)

OCT4 Antibody (Center S236) 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.

OCT4 Antibody (Center S236) 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.

OCT4 Antibody (Center S236) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

OCT4 Antibody (Center S236) Blocking Peptide - Images

OCT4 Antibody (Center S236) Blocking Peptide - Background

This gene encodes a transcription factor containing a POUhomeodomain. 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.

OCT4 Antibody (Center S236) Blocking Peptide - References

Abu-Remaileh, M., et al. EMBO J. 29(19):3236-3248(2010) Ucisik-Akkaya, E., et al. Mol. Hum. Reprod. 16(10):770-777(2010) Schultz, S.S., et al. Mol. Cell. Biol. 30(18):4521-4534(2010) Kim, S., et al. Br. J. Cancer 102(2):436-446(2010) Wang, X., et al. Stem Cells 27(6):1265-1275(2009)