

**Phospho-OCT4(S236) Antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP3724a****Specification**

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**Phospho-OCT4(S236) Antibody - Product Information**

Application	DB,E
Primary Accession	<a href="#">Q01860</a>
Other Accession	<a href="#">Q9TSV5</a> , <a href="#">P20263</a> , <a href="#">Q97552</a> , <a href="#">Q06416</a>
Reactivity	Human
Predicted	Bovine, Mouse, Pig
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	38571

**Phospho-OCT4(S236) Antibody - 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

**Target/Specificity**

This OCT4 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S236 of human OCT4.

**Dilution**

DB~~1:500

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Phospho-OCT4(S236) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Phospho-OCT4(S236) Antibody - 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}

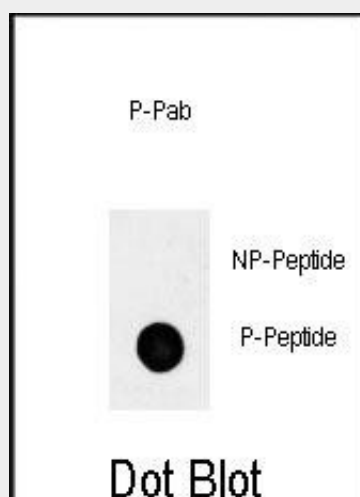
**Tissue Location**

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 - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Phospho-OCT4(S236) Antibody - Images**

Dot blot analysis of anti-phospho-OCT4-S236 Phospho-specific Pab (Cat. #AP3724a ) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

**Phospho-OCT4(S236) Antibody - 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 - 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)