

**MOS Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP8069a****Specification**

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**MOS Antibody (N-term) - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">P00540</a>
Other Accession	<a href="#">NP_005363</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	37820
Antigen Region	1-30

**MOS Antibody (N-term) - Additional Information****Gene ID** 4342**Other Names**

Proto-oncogene serine/threonine-protein kinase mos, Oocyte maturation factor mos,  
Proto-oncogene c-Mos, MOS

**Target/Specificity**

This MOS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human MOS.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**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**

MOS Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**MOS Antibody (N-term) - Protein Information****Name** MOS ([HGNC:7199](#))

**Function** Serine/threonine kinase involved in the regulation of MAPK signaling. Is an activator of the ERK1/2 signaling cascade playing an essential role in the stimulation of oocyte maturation.

**Cellular Location**

Cytoplasm.

**Tissue Location**

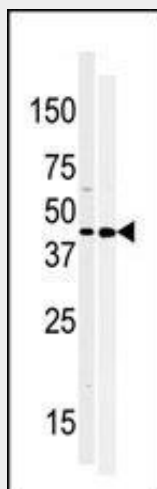
Highly expressed in oocytes. Lower expression is detected in early embryo.

**MOS Antibody (N-term) - Protocols**

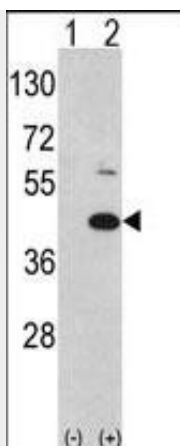
Provided below are standard protocols that you may find useful for product applications.

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

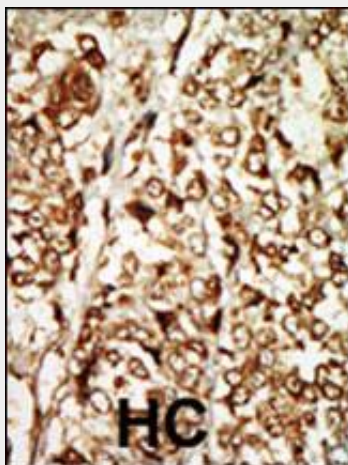
**MOS Antibody (N-term) - Images**



Western blot analysis of anti-MOS-R8 Pab (Cat. #AP8069a) in 293 and HeLa cell line lysate (35ug/lane). MOS-R8 (arrow) was detected using the purified Pab.



Western blot analysis of MOS (arrow) using rabbit polyclonal hMOS-R8 (Cat. #AP8069a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the MOS gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

### **MOS Antibody (N-term) - Background**

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the  $\gamma$  phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The STE group (homologs of yeast Sterile 7, 11, 20 kinases) consists of 50 kinases related to the mitogen-activated protein kinase (MAPK) cascade families (Ste7/MAP2K, Ste11/MAP3K, and Ste20/MAP4K). MAP kinase cascades, consisting of a MAPK and one or more upstream regulatory kinases (MAPKKs) have been best characterized in the yeast pheromone response pathway. Pheromones bind to Ste cell surface receptors and activate yeast MAPK pathway.

### **MOS Antibody (N-term) - References**

Caubet, J.F., et al., EMBO J. 4(9):2245-2248 (1985).  
Watson, R., et al., Proc. Natl. Acad. Sci. U.S.A. 79(13):4078-4082 (1982).  
Singh, B., et al., Prog Cell Cycle Res 3, 251-259 (1997).