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AP-1 Sumoylation site Antibody Blocking Peptide

Synthetic peptide
Catalog # BP2507b

Specification

AP-1 Sumoylation site Antibody Blocking Peptide - Product Information

Primary Accession P05412

AP-1 Sumoylation site Antibody Blocking Peptide - Additional Information

Gene ID 3725

Other Names
Transcription factor AP-1, Activator protein 1, AP1, Proto-oncogene c-Jun, V-jun avian sarcoma virus 17 oncogene homolog, p39, JUN

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2507b is HPRLQA<B>LKEE</B>PQTVPE, containing a predicted sumoylation site from the C-terminal region of human AP-1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

AP-1 Sumoylation site Antibody Blocking Peptide - Protein Information

Name JUN

Function
Transcription factor that recognizes and binds to the AP-1 consensus motif 5'-TGA[GC]TCA-3' (PubMed:10995748, PubMed:22083952). Heterodimerizes with proteins of the FOS family to form an AP-1 transcription complex, thereby enhancing its DNA binding activity to the AP-1 consensus sequence 5'-TGA[GC]TCA-3' and enhancing its transcriptional activity (By similarity). Together with FOSB, plays a role in activation-induced cell death of T cells by binding to the AP-1 promoter site of FASLG/CD95L, and inducing its transcription in response to activation of the TCR/CD3 signaling pathway (PubMed:12618758). Promotes activity of NR5A1 when phosphorylated by HIPK3 leading to increased steroidogenic gene expression upon cAMP signaling pathway stimulation (PubMed:<a

href="http://www.uniprot.org/citations/17210646" target="_blank">17210646). Involved in activated KRAS-mediated transcriptional activation of USP28 in colorectal cancer (CRC) cells (PubMed:24623306). Binds to the USP28 promoter in colorectal cancer (CRC) cells (PubMed:24623306).

Cellular Location
Nucleus.

Tissue Location
Expressed in the developing and adult prostate and prostate cancer cells.

AP-1 Sumoylation site Antibody Blocking Peptide - Protocols

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

- Blocking Peptides

AP-1 Sumoylation site Antibody Blocking Peptide - Images

AP-1 Sumoylation site Antibody Blocking Peptide - Background

The gene for AP-1 is the putative transforming gene of avian sarcoma virus 17. AP-1 is highly similar to the viral protein, and interacts directly with specific target DNA sequences to regulate gene expression. The AP-1 gene is intronless and is mapped to 1p32-p31, a chromosomal region involved in both translocations and deletions in human malignancies. AP-1 dimer activity is downregulated by SUMO-1, SUMO-2, and SUMO-3.

AP-1 Sumoylation site Antibody Blocking Peptide - References

Bossis, et al., Mol Cell Biol. 2005 Aug;25(16):6964-79.Perez-Sala, D., et al., J. Biol. Chem. 278(51):51251-51260 (2003).Yang, H., et al., J. Biol. Chem. 278(51):50887-50896 (2003).Toborek, M., et al., J. Neurochem. 84(1):169-179 (2003).Wang, Y.N., et al., J. Biol. Chem. 278(46):45848-45857 (2003).