

**E2EPF Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP2120a****Specification**

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**E2EPF Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [Q16763](#)**E2EPF Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 27338**Other Names**

Ubiquitin-conjugating enzyme E2 S, E2-EPF, Ubiquitin carrier protein S, Ubiquitin-conjugating enzyme E2-24 kDa, Ubiquitin-conjugating enzyme E2-EPF5, Ubiquitin-protein ligase S, UBE2S, E2EPF

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP2120a](/product/products/AP2120a) was selected from the N-term region of human E2EPF. 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.

**E2EPF Antibody (N-term) Blocking Peptide - Protein Information****Name** UBE2S**Synonyms** E2EPF**Function**

Accepts ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins (PubMed: [19820702](http://www.uniprot.org/citations/19820702), PubMed: [19822757](http://www.uniprot.org/citations/19822757), PubMed: [22496338](http://www.uniprot.org/citations/22496338), PubMed: [27259151](http://www.uniprot.org/citations/27259151)). Catalyzes 'Lys-11'-linked polyubiquitination. Acts as an essential factor of the anaphase promoting complex/cyclosome (APC/C), a cell cycle-regulated ubiquitin ligase that controls progression through mitosis (PubMed: [19820702](http://www.uniprot.org/citations/19820702))

target="\_blank">19820702</a>, PubMed:<a href="http://www.uniprot.org/citations/19822757" target="\_blank">19822757</a>, PubMed:<a href="http://www.uniprot.org/citations/27259151" target="\_blank">27259151</a>, PubMed:<a href="http://www.uniprot.org/citations/27910872" target="\_blank">27910872</a>). Acts by specifically elongating 'Lys-11'-linked polyubiquitin chains initiated by the E2 enzyme UBE2C/UBCH10 on APC/C substrates, enhancing the degradation of APC/C substrates by the proteasome and promoting mitotic exit (PubMed:<a href="http://www.uniprot.org/citations/19820702" target="\_blank">19820702</a>, PubMed:<a href="http://www.uniprot.org/citations/19822757" target="\_blank">19822757</a>, PubMed:<a href="http://www.uniprot.org/citations/27259151" target="\_blank">27259151</a>). Also acts by elongating ubiquitin chains initiated by the E2 enzyme UBE2D1/UBCH5 in vitro; it is however unclear whether UBE2D1/UBCH5 acts as an E2 enzyme for the APC/C in vivo. Also involved in ubiquitination and subsequent degradation of VHL, resulting in an accumulation of HIF1A (PubMed:<a href="http://www.uniprot.org/citations/16819549" target="\_blank">16819549</a>). In vitro able to promote polyubiquitination using all 7 ubiquitin Lys residues, except 'Lys-48'-linked polyubiquitination (PubMed:<a href="http://www.uniprot.org/citations/20061386" target="\_blank">20061386</a>, PubMed:<a href="http://www.uniprot.org/citations/20622874" target="\_blank">20622874</a>).

## **E2EPF Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

## **E2EPF Antibody (N-term) Blocking Peptide - Images**

## **E2EPF Antibody (N-term) Blocking Peptide - Background**

Ubiquitin is a 76 amino acid highly conserved eukaryotic polypeptide that selectively marks cellular proteins for proteolytic degradation by the 26S proteasome. The process of target selection, covalent attachment and shuttle to the 26S proteasome is a vital means of regulating the concentrations of key regulatory proteins in the cell by limiting their lifespans. Polyubiquitination is a common feature of this modification. Serial steps for modification include the activation of ubiquitin, an ATP-dependent formation of a thioester bond between ubiquitin and the enzyme E1, transfer by transacylation of ubiquitin from E1 to the ubiquitin conjugating enzyme E2, and covalent linkage to the target protein directly by E2 or via E3 ligase enzyme. Deubiquitination enzymes also exist to reverse the marking of protein substrates. Posttranslational tagging by Ub is involved in a multitude of cellular processes, including the cell cycle, cell growth and differentiation, embryogenesis, apoptosis, signal transduction, DNA repair, regulation of transcription and DNA replication, transmembrane transport, stress responses, the immune response, and nervous system functions.

## **E2EPF Antibody (N-term) Blocking Peptide - References**

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002). Liu, Z., et al., J. Biol. Chem. 267(22):15829-15835 (1992).