

**Phospho-KLF4(S245) Antibody Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP3652a****Specification**

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**Phospho-KLF4(S245) Antibody Blocking peptide - Product Information**Primary Accession [O43474](#)**Phospho-KLF4(S245) Antibody Blocking peptide - Additional Information****Gene ID** 9314**Other Names**

Krueppel-like factor 4, Epithelial zinc finger protein EZF, Gut-enriched krueppel-like factor, KLF4, EZF, GKLF

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP3652a](/products/AP3652a) was selected from the region of human Phospho-KLF4-S245. 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.

**Phospho-KLF4(S245) Antibody Blocking peptide - Protein Information****Name** KLF4 ([HGNC:6348](#))**Synonyms** EZF, GKLF**Function**

Transcription factor; can act both as activator and as repressor. Binds the 5'-CACCC-3' core sequence. Binds to the promoter region of its own gene and can activate its own transcription. Regulates the expression of key transcription factors during embryonic development. Plays an important role in maintaining embryonic stem cells, and in preventing their differentiation. Required for establishing the barrier function of the skin and for postnatal maturation and maintenance of the ocular surface. Involved in the differentiation of epithelial cells and may also function in skeletal and kidney development. Contributes to the down-regulation of p53/TP53 transcription.

**Cellular Location**

Nucleus {ECO:0000250|UniProtKB:Q60793}. Cytoplasm {ECO:0000250|UniProtKB:Q60793}

**Phospho-KLF4(S245) Antibody Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**Phospho-KLF4(S245) Antibody Blocking peptide - Images****Phospho-KLF4(S245) Antibody Blocking peptide - Background**

Krüppel-like factor 4 (KLF4) is a transcription factor involved in both proliferation and differentiation in the colon. It is down-regulated in both mouse and human colonic adenomas and has been implicated as a tumor suppressor in the gut, whereas in breast cancer, KLF4 is an oncogene. KLF4 is also involved in reprogramming differentiated cells into pluripotent stem cells. KLF4 can act as a transcriptional activator or repressor, but the underlying mechanisms are poorly understood.

**Phospho-KLF4(S245) Antibody Blocking peptide - References**

Alder, J.K., J. Immunol. 180 (8), 5645-5652 (2008) Natesampillai, S., Am. J. Physiol. Endocrinol. Metab. 294 (2), E385-E391 (2008) Evans, P.M., J. Biol. Chem. 282 (47), 33994-34002 (2007) Behr, R., Mol. Hum. Reprod. 13 (11), 815-820 (2007)