

PDF Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP19023c**Specification**

PDF Antibody (Center) Blocking Peptide - Product Information

Primary Accession [Q9HBH1](#)

PDF Antibody (Center) Blocking Peptide - Additional Information

Gene ID 64146

Other Names

Peptide deformylase, mitochondrial, Polypeptide deformylase, PDF, PDF1A

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.

PDF Antibody (Center) Blocking Peptide - Protein Information

Name PDF {ECO:0000303|PubMed:19236878}

Function

Removes the formyl group from the N-terminal Met of newly synthesized proteins.

Cellular Location

Mitochondrion

Tissue Location

Ubiquitous..

PDF Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

PDF Antibody (Center) Blocking Peptide - Images**PDF Antibody (Center) Blocking Peptide - Background**

Protein synthesis proceeds after formylation of methionine by methionyl-tRNA formyl transferase (FMT) and transfer of the charged initiator f-met tRNA to the ribosome. In eubacteria and eukaryotic organelles the product of this gene, peptide deformylase (PDF), removes the formyl group from the initiating methionine of nascent peptides. In eubacteria, deformylation of nascent peptides is required for subsequent cleavage of initiating methionines by methionine aminopeptidase. The discovery that a natural inhibitor of PDF, actinonin, acts as an antimicrobial agent in some bacteria has spurred intensive research into the design of bacterial-specific PDF inhibitors. In human cells, only mitochondrial proteins have N-formylation of initiating methionines. Protein inhibitors of PDF or siRNAs of PDF block the growth of cancer cell lines but have no effect on normal cell growth. In humans, PDF function may therefore be restricted to rapidly growing cells.

PDF Antibody (Center) Blocking Peptide - References

Escobar-Alvarez, S., et al. J. Mol. Biol. 387(5):1211-1228(2009) Wang, L., et al. Cancer Epidemiol. Biomarkers Prev. 17(12):3558-3566(2008) Lee, M.D., et al. J. Clin. Invest. 114(8):1107-1116(2004) Serero, A., et al. J. Biol. Chem. 278(52):52953-52963(2003) Lee, M.D., et al. Biochem. Biophys. Res. Commun. 312(2):309-315(2003)