

**PDF Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP19023c**

**Specification**

---

**PDF Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O9HBH1</a>
Other Accession	<a href="#">NP_071736.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	27013
Antigen Region	125-151

**PDF Antibody (Center) - Additional Information**

**Gene ID** 64146

**Other Names**

Peptide deformylase, mitochondrial, Polypeptide deformylase, PDF, PDF1A

**Target/Specificity**

This PDF antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 125-151 amino acids from the Central region of human PDF.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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**

PDF Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**PDF Antibody (Center) - 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

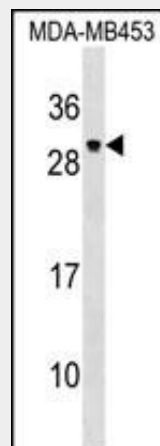
Ubiquitous..

### PDF Antibody (Center) - 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](#)

### PDF Antibody (Center) - Images



PDF Antibody (Center) (Cat. #AP19023c) western blot analysis in MDA-MB453 cell line lysates (35ug/lane). This demonstrates the PDF antibody detected the PDF protein (arrow).

### PDF Antibody (Center) - 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) - 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)