OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA502989

PDF Mouse Monoclonal Antibody [Clone ID: OTI3C12]

Product data:

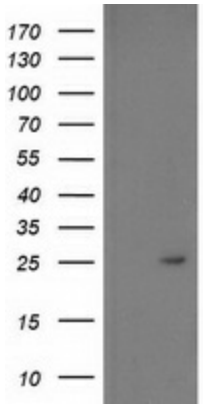
Product Type:	Primary Antibodies
Clone Name:	OTI3C12
Applications:	FC, IF, WB
Recommended Dilution:	WB 1:500, IF 1:100, FLOW 1:100
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human PDF (NP_071736) produced in HEK293T cell.
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	1 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	19.4 kDa
Gene Name:	peptide deformylase, mitochondrial
Database Link:	NP_071736 Entrez Gene 64146 Human Q9HBH1

View online »

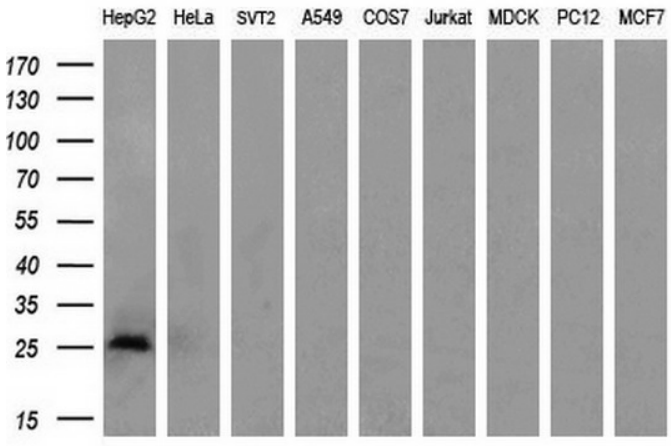
Background:

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. [provided by RefSeq]

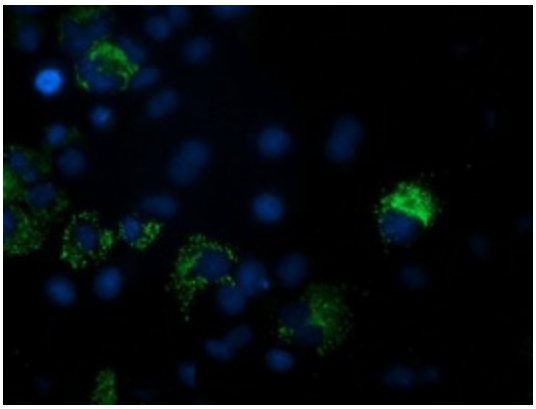
Product images:



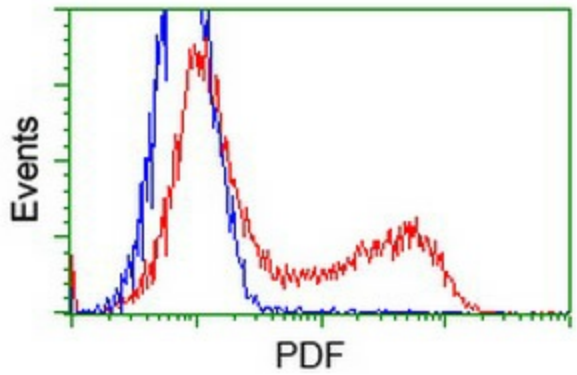
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PDF ([RC205788], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PDF. Positive lysates [LY411712] (100ug) and [LC411712] (20ug) can be purchased separately from OriGene.



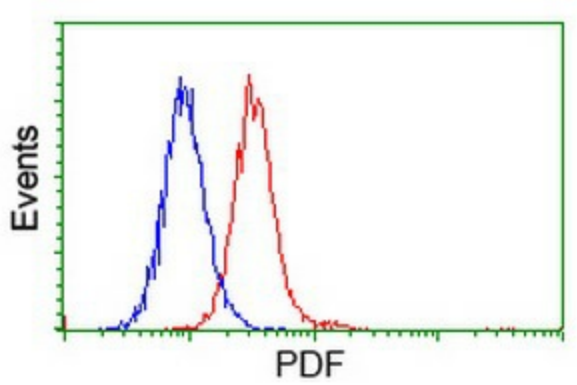
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-PDF monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human) (1:200).



Anti-PDF mouse monoclonal antibody (TA502989) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PDF ([RC205788]).



HEK293T cells transfected with either [RC205788] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-PDF antibody (TA502989), and then analyzed by flow cytometry.



Flow cytometric Analysis of Hela cells, using anti-PDF antibody (TA502989), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).