Recombinant Human PDF protein, His-tagged

Cat. No. PDF-89H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human PDF protein, fused to His-tag, was expressed in E. coli.
Species	Human
Source	E.coli
Description	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.
Form	Supplied as a 0.2 μm filtered solution in 50mM Tris-HCl pH8.0, 300mM NaCl, 50% glycerol.
Molecular Mass	~24.3 kDa
AA Sequence	MEGPALRRSYWRHLRRLVLGPPEPPFSHVCQVGDPVLRGVAAPVERAQLGGPELQ

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	RLTQRLVQVMRRRRCVGLSAPQLGVPRQVLALELPEALCRECPPRQRALRQMEPF PLRVFVNPSLRVLDSRLVTFPEGCESVAGFLACVPRFQAVQISGLDPNGEQVVWQA SGWAARIIQHEMDHLQGCLFIDKMDSRTFTNVYWMKVNDLEHHHHHH
Purity	>90%
Storage	Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Concentration	0.3mg/mL

GENE INFORMATION

Gene Name	PDF peptide deformylase, mitochondrial [Homo sapiens (human)]
Official Symbol	PDF
Synonyms	Growth/differentiation factor 15; GDF-15; Placental TGF-beta; NAG-1; Macrophage inhibitory cytokine 1; MIC1; NSAID-activated gene 1 protein; PTGFB; NRG-1; MIC-1; PLAB; NSAID-regulated gene 1 protein; PDF; Prostate differentiation factor; Placental bone morphogenetic protein
Gene ID	64146
mRNA Refseq	NM_022341
Protein Refseq	NP_071736
MIM	618720
UniProt ID	Q9HBH1

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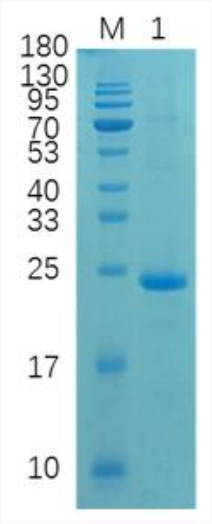
SDS-PAGE	 12% reducing SDS-PAGE analysis of purified PDF (approximately 2 mg protein loaded).

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