9051 Mira Mesa Blvd, #910094
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ATPIF1 Human

ATPase Inhibitory Factor 1 Human Recombinant
RCP0148

Product Overview

Name	ATPIF1 Human
Description	
ATPase Inhibitory Factor 1 Human Recombinant	
Accession (Primary)	Q9UII2
Synonyms	
ATPase inhibitor mitochondrial, Inhibitor of F(1)F(o)-ATPase, IF(1), IF1, ATPIF1, ATPI, IP, ATPIP.	
Introduction	
ATPase inhibitory factor 1 (ATPIF1) attaches to the C-terminal region of a beta subunit of the F1-ATPase at low pH values and, through interference of the beta and gamma subunit interaction, ATPIF1 controls the activity of the F1 (the hydrophilic catalytic core), F0 (the membrane embedded protein channel) ATPase. ATPIF1 overexpression in a number of human carcinomas additionally reinforces its participation in oncogenesis and offers insight into the transformed metabolism of cancer cells, including the reprogramming of energy metabolism in relation to glycolysis. Endogenous F1F(o)-ATPase inhibitor curbing ATP depletion when the mitochondrial membrane potential drops below a threshold and the F1F(o)-ATP synthase begins hydrolyzing ATP to pump protons out of the mitochondrial matrix.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered colorless solution.	
Formulation	
ATPIF1 protein solution (1mg/ml) containing 20mM Tris-HCl buffer (pH 8.0), 0.2M NaCl and 50% glycerol.	
Stability	
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.	
Purity	
Greater than 95.0% as determined by SDS-PAGE.	
Amino acid sequence	
MGSSHHHHHH SSGLVPRGSH MGSHM GSDQS ENVDRGAGSI REAGGAFGKR EQAEEERYFR AQSREQLAAL KKHHEEEIVH HKKEIERLQK EIERHKQKIK MLKHDD.	

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Precautions

ATPIF1 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (Q9UII2)