

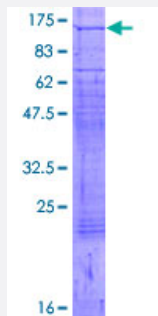
Full-Length

ATP2A1 (Human) Recombinant Protein (P01)

Catalog # H00000487-P01

Size 10 ug, 25 ug

Applications



Specification

Product Description

Human ATP2A1 full-length ORF (NP_004311.1, 1 a.a. - 994 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MEAAHAKTTEECLAYFGVSETTGLTPDQVKRNLEKYGLNELPAEEGKTLWELVIEQFEDLLVRILL
LAACISFVLAWFEEGEETITAFVEPFVILLILIANAMGVWQERNAENAIEALKEYEPEMGKVYRADR
KSVQRIKARDIVPGDIVEVAVGDKVPADIRILAIKSTTLRVDQSILTGESVSVIKHTEPVPDPRAVNQ
DKKNMLFSGTNIAAGKALGVATTGVGTEIGKIRDQMAATEQDKTPLQQKLDEFGEQLSKVISLICV
AVWLINIGHFNDPVHGGSWFRGAIYFKIAVALAVAAIPEGLPAVITTCLALGTRRMAKKNAMRSLP
SVETLGCTSVICSDKTGTLTTNQMSVCKMFIDKVDGDICLLNEFSITGSTYAPEGEVLKNDKPVRP
GQYDGLVELATICALCNDSSLDNFNEAKGVYEKVGAEATETALTTLVEKMNVFNTDVRSLSKVERAN
ACNSVIRQLMKKEFTLEFSRDRKSMSVYCSPAKSSRAAVGNKMFVKGAPEGVIDRCNYVRVGT
RVPLTGPVKEKIMAVIKEWGTGRDTRLCLALATRDTPPKREEMVLDDSFLEFETDLTFVGVVG
MLDPPRKEVTGSIQLCRDAGIRVIMITGDNKGTAIAICRRIGIFGENEEVADRAYTGREFDDLPLAEQ
REACRRACCFARVEPSHKSKMEYLQSYDEITAMTGDGVNDAPALKKAEIGIAMGSGTAVAKTAS
EMVLADDNFSTVAAVEEGRAIMNMKQFIRYLISNVGEVVCIFLTAALGLPEALIPVQLLWVNLVT
DGLPATALGFNPPDLDIMDRPPRSPKEPLISGWLFFRYMAIGGYVGAATVGAAAWWFLYAEDGP
HVNYSQLTHFMQCTEDNTHFEGIDCEVFEAPEPMTMALSVLVTIEMCNALNSLSENQSLLRMPP
WVNWLLGSICLSMSLHFLILYVDPLPMIFKLRLDLTQWLMVLKISLPVIGLDEILKFVARNYLEG

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

135.7

Preparation Method

[in vitro wheat germ expression system](#)

Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — ATP2A1

Entrez GeneID	487
GeneBank Accession#	NM_004320.3
Protein Accession#	NP_004311.1
Gene Name	ATP2A1
Gene Alias	ATP2A, SERCA1
Gene Description	ATPase, Ca ⁺⁺ transporting, cardiac muscle, fast twitch 1
Omim ID	108730 601003
Gene Ontology	Hyperlink

Gene Summary	This gene encodes one of the SERCA Ca(2+)-ATPases, which are intracellular pumps located in the sarcoplasmic or endoplasmic reticula of muscle cells. This enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen, and is involved in muscular excitation and contraction. Mutations in this gene cause some autosomal recessive forms of Brody disease, characterized by increasing impairment of muscular relaxation during exercise. Alternative splicing results in two transcript variants encoding different isoforms. [provided by RefSeq]
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Other Designations

ATPase, Ca⁺⁺ transporting, fast twitch 1|OTTHUMP00000162562|SR Ca(2+)-ATPase 1|calcium pump 1|calcium-transporting ATPase sarcoplasmic reticulum type, fast twitch skeletal muscle isoform|endoplasmic reticulum class 1/2 Ca(2+) ATPase|sarcoplasmic/endoplasm

Pathway

- [Calcium signaling pathway](#)