

# Recombinant Full Length Human ATP2A2 Protein, GST-tagged

**Cat. No.** ATP2A2-1245HF    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| <b>Product Overview</b> | Human ATP2A2 full-length ORF ( NP_001672.1, 1 a.a. - 997 a.a.) recombinant protein with GST-tag at N-terminal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Source</b>           | In Vitro Cell Free System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>ProteinLength</b>    | 997 amino acids                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Description</b>      | 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 into the sarcoplasmic reticulum lumen, and is involved in regulation of the contraction/relaxation cycle. Mutations in this gene cause Darier-White disease, also known as keratosis follicularis, an autosomal dominant skin disorder characterized by loss of adhesion between epidermal cells and abnormal keratinization. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Oct 2008] |
| <b>Molecular Mass</b>   | 136.1 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>AA Sequence</b>      | MENAHTKTVE EVLGHFGVNE STGLSLEQVK KLKERWGSNE LPAEEGKTL<br>ELVIEQFEDL LVRILLAAAC ISFVLAWFEE GEETITAFVE PFVILLILVA<br>NAIVGVWQER NAENAIEALK EYEPENGKVV RQDRKSVQRI KAKDIVPGDI<br>VEIAVGDKVP ADIRLTSIKS TTLRVDQSIL TGESVSVIKH TDPVPDPRAV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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NQDKKNMLFS GTNIAAGKAM GVVVATGVNT EIGKIRDEMVA TEQERTPLQ  
 QKLDEFGEQL SKVISLICIA VWIINIGHFN DPVHGGSWIR GAIYYFKIAV  
 ALAVAAIPEG LPAVITTCLA LGTRRMAKKN AIVRSLPSVE TLGCTSVICS  
 DKTGTLTTNQ MSVCRMFLD RVEGDTCSLN EFTITGSTYA PIGEVHKDDK  
 PVNCHQYDGL VELATICALC NDSALDYNEA KGVYEKVGEA TETALTCLVE  
 KMNVFDELK GLSKIERANA CNSVIKQLMK KEFTLEFSRD RKSMSVYCTP  
 NKPSRTSMK MFVKGAPGV IDRCTHIRVG STKVPMTSGV KQKIMSVIRE  
 WSGSDTLRC LALATHDNPL RREEMHLED ANFIKYETNL TFGVCVGLD  
 PPRIEVASSV KLCRQAGIRV IMITGDNKGT AVAICRRIGI FGQDEDVTSK  
 AFTGREFDEL NPSAQRDACL NARCFARVEP SHKSKIVEFL QSFDEITAMT  
 GDGVNDAPAL KKAIEIGIAMG SGTAVAKTAS EMVLADDNFS TIVAAVEEGR  
 AIYNNMKQFI RYLISSNVGE VVCIFLTAAL GFPEALIPVQ LLWVNLVTDG  
 LPATALGFNP PDLDIMNKPP RNPKEPLISG WLFFRYLAIG CYVGAATVGA  
 AAWWFIAADG GPRVSFYQLS HFLQCKEDNP DFEGVDCAIF ESPYPMTMAL  
 SVLVTIEMCN ALNSLSENQS LLRMPPWENI WLVGSIKLSM SLHFLILYVE  
 PLPLIFQITP LNVQTQWLMVL KISLPVILMD ETLKFVARNY LEPAILE

**Applications**

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

**Storage**

Store at -80 centigrade. Aliquot to avoid repeated freezing and thawing.

**Storage Buffer**

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

**GENE INFORMATION**
**Gene Name**

ATP2A2 ATPase sarcoplasmic/endoplasmic reticulum Ca<sup>2+</sup> transporting 2 [ Homo sapiens (human) ]

**Official Symbol**

ATP2A2

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|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Synonyms</b>       | ATP2A2; ATPase sarcoplasmic/endoplasmic reticulum Ca <sup>2+</sup> transporting 2; DD; DAR; ATP2B; SERCA2; sarcoplasmic/endoplasmic reticulum calcium ATPase 2; ATPase Ca <sup>++</sup> transporting cardiac muscle slow twitch 2; ATPase, Ca <sup>++</sup> dependent, slow-twitch, cardiac muscle-2; SR Ca(2+)-ATPase 2<br>calcium pump 2; calcium-transporting ATPase sarcoplasmic reticulum type, slow twitch skeletal muscle isoform; cardiac Ca <sup>2+</sup> ATPase; endoplasmic reticulum class 1/2 Ca(2+) ATPase; EC 3.6.3.8 |
| <b>Gene ID</b>        | <a href="#">488</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>mRNA Refseq</b>    | <a href="#">NM_001681</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Protein Refseq</b> | <a href="#">NP_001672</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>MIM</b>            | <a href="#">108740</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>UniProt ID</b>     | <a href="#">P16615</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |