

Mitochondrial brown fat uncoupling protein 1 Recombinant Protein | UCP1 recombinant protein

Recombinant Human Mitochondrial brown fat uncoupling protein 1

CATALOG # AAA113913	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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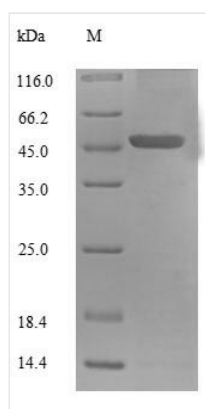
PRODUCT SYNONYMS

Mitochondrial brown fat uncoupling protein 1; Recombinant Human Mitochondrial brown fat uncoupling protein 1; Solute carrier family 25 member 7; Thermogenin; UCP1 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	2-307aa; Full Length of Mature Protein
Sequence	GGLTASDVHP TLGVQLFSAG IAACLADVIT FPLDTAKVRL QVQGECPSTSS VIRYKGVLTG ITAVVKTEGR MKLYSGLPAG LQRQISSASL RIGLYDTVQE FLTAGKETAP SLGSKILAGL TTGGVAVFIG QPTEVVKVRL QAQSHLHGK PRYTGTYNAY RIIATTEGLT GLWKGTTPNL MRSVIINCTE LVTYDLMKEA FVKNNILADD VPCHLVSAI AGFCATAMSS PVDVVKTRFI NSPPGQYKSV PNCAMKVFTN EGPTAFFKGL VPSFLRLGSW NVIMFVCFEQ LKRELSKSRQ TMDCAT
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for UCP1 recombinant protein	UCP are mitochondrial transporter proteins that create proton leaks across the inner mitochondrial membrane, thus uncoupling oxidative phosphorylation from ATP synthesis. As a result, energy is dissipated in the form of heat.
Product Categories/Family for UCP1 recombinant protein	Transport

References	Human uncoupling protein gene structure, comparison with rat gene, and assignment to the long arm of chromosome 4.Cassard A.M., Bouillaud F., Mattei M.-G., Hentz E., Raimbault S., Thomas M., Ricquier D.J. Cell. Biochem. 43:255-264(1990) Bouillaud F.Sequence of the cDNA coding for the human uncoupling protein UCP.Bouillaud F., Ricquier D., Raimbault S. Generation and annotation of the DNA sequences of human chromosomes 2 and 4.Hillier L.W., Graves T.A., Fulton R.S., Fulton L.A., Pepin K.H., Minx P., Wagner-McPherson C., Layman D., Wylie K., Sekhon M., Becker M.C., Fewell G.A., Delehaunty K.D., Miner T.L., Nash W.E., Kremitzki C., Oddy L., Du H., Sun H., Bradshaw-Cordum H., Ali J., Carter J., Cordes M., Harris A., Isak A., van Brunt A., Nguyen C., Du F., Courtney L., Kalicki J., Ozersky P., Abbott S., Armstrong J., Belter E.A., Caruso L., Cedroni M., Cotton M., Davidson T., Desai A., Elliott G., Erb T., Fronick C., Gaige T., Haakenson W., Haglund K., Holmes A., Harkins R., Kim K., Kruchowski S.S., Strong C.M., Grewal N., Goyea E., Hou S., Levy A., Martinka S., Mead K., McLellan M.D., Meyer R., Randall-Maher J., Tomlinson C., Dauphin-Kohlberg S., Kozlowicz-Reilly A., Shah N., Swearngen-Shahid S., Snider J., Strong J.T., Thompson J., Yoakum M., Leonard S., Pearman C., Trani L., Radionenko M., Waligorski J.E., Wang C., Rock S.M., Tin-Wollam A.-M., Maupin R., Latreille P., Wendl M.C., Yang S.-P., Pohl C., Wallis J.W., Spieth J., Bieri T.A., Berkowicz N., Nelson J.O., Osborne J., Ding L., Meyer R., Sabo A., Shotland Y., Sinha P., Wohldmann P.E., Cook L.L., Hickenbotham M.T., Eldred J., Williams D., Jones T.A., She X., Ciccarelli F.D., Izaurralde E., Taylor J., Schmutz J., Myers R.M., Cox D.R., Huang X., McPherson J.D., Mardis E.R., Clifton S.W., Warren W.C., Chinwalla A.T., Eddy S.R., Marra M.A., Ovcharenko I., Furey T.S., Miller W., Eichler E.E., Bork P., Suyama M., Torrents D., Waterston R.H., Wilson R.K.Nature 434:724-731(2005) Detection of brown adipose tissue uncoupling protein mRNA in adult patients by a human genomic probe.Bouillaud F., Villarroja F., Hentz E., Raimbault S., Cassard A.M., Ricquier D.Clin. Sci. 75:21-27(1988) A polymorphism in the 5' untranslated region and a Met229-->Leu variant in exon 5 of the human UCP1 gene are associated with susceptibility to type II diabetes mellitus.Mori H., Okazawa H., Iwamoto K., Maeda E., Hashiramoto M., Kasuga M.Diabetologia 44:373-376(2001) Uncoupling protein 1 and 3 polymorphisms are associated with waist-to-hip ratio.Herrmann S.M., Wang J.G., Staessen J.A., Kertmen E., Schmidt-Petersen K., Zidek W., Paul M., Brand E.J. Mol. Med. 81:327-332(2003)
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NCBI AND UNIPROT INFORMATION

NCBI GI #	11225256
NCBI GeneID	7350
NCBI Accession #	NP_068605.1
NCBI GenBank Nucleotide #	NM_021833.4
UniProt Accession #	P25874 ; Q13218 ; Q4KMZ3 ; Q68G66
Molecular Weight	34.9 kDa
NCBI Official Full Name	mitochondrial brown fat uncoupling protein 1
NCBI Official Synonym Full Names	uncoupling protein 1 (mitochondrial, proton carrier)
NCBI Official Symbol	UCP1
NCBI Official Synonym Symbols	UCP; SLC25A7
NCBI Protein Information	mitochondrial brown fat uncoupling protein 1
UniProt Protein Name	Mitochondrial brown fat uncoupling protein 1
UniProt Gene Name	UCP1
UniProt Synonym Gene Names	SLC25A7; UCP; UCP 1
UniProt Entry Name	UCP1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.