

# Recombinant Human Mitochondrial brown fat uncoupling protein 1(UCP1)

Catalog No: #AP70902

Package Size: #AP70902-1 20ug #AP70902-2 100ug #AP70902-3 1mg

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## Description

|                       |                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name          | Recombinant Human Mitochondrial brown fat uncoupling protein 1(UCP1)                                                                                                                                                                                                                                                                                                                            |
| Host Species          | E.coli                                                                                                                                                                                                                                                                                                                                                                                          |
| Purification          | Greater than 90% as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                     |
| Immunogen Description | Expression Region:2-307aaSequence Info:Full Length                                                                                                                                                                                                                                                                                                                                              |
| Other Names           | Solute carrier family 25 member 7Thermogenin                                                                                                                                                                                                                                                                                                                                                    |
| Accession No.         | P25874                                                                                                                                                                                                                                                                                                                                                                                          |
| Calculated MW         | 48.9 kDa                                                                                                                                                                                                                                                                                                                                                                                        |
| Tag Info              | N-terminal 6xHis-SUMO-tagged                                                                                                                                                                                                                                                                                                                                                                    |
| Target Sequence       | GGLTASDVHPTLGVQLFSAGIAACLADVITFPLDTAKVRLQVQGECPTSSVIRYKGVLTITAVVKTEGRMKLY<br>SGLPAGLQRQISSASLRIGLYDTVQEFLTAGKETAPSLGSKILAGLTGGVAVFIGQPTEVVKVRLQAQSHLHGI<br>KPRYTGTYNAYRIATTEGLTGLWKGTPNLMRSVIINCTELVTYDLMKEAFVKNNILADDVPCHLVLSALIAGFCA<br>TAMSSPVDVVKTRFINSPGQYKSPNCAMKVFTNEGPTAFFKGLVPSFLRLGSWNVIMFVCFEQLKRELSKS<br>RQTMDCAT                                                                   |
| Formulation           | Tris-based buffer50% glycerol                                                                                                                                                                                                                                                                                                                                                                   |
| Storage               | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.<br><br>Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |

## Background

UCP are mitochondrial transporter proteins that create proton leaks across the inner mitochondrial mbrane, thus uncoupling oxidative phosphorylation from ATP synthesis. As a result, energy is dissipated in the form of heat.

## References

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) Research Topic:Transport

Note: This product is for in vitro research use only and is not intended for use in humans or animals.