# Data Sheet (Cat.No.TMPH-01676)

TargetMol

## Meteorin-like/METRNL Protein, Human, Recombinant (His & SUMO)

### General Information

Synonyms: METRNL;Meteorin-like protein;Subfatin

Protein Construction: 46-311 aa

Species: Human

Expression Host: E. coli

Accession: Q641Q3

Molecular Weight: 46.0 kDa (predicted)

AA Sequence: QYSSDRCSWKGSGLTHEAHRKEVEQVYLRCAAGAVEWMYPTGALIVNLRPNTFSPARHLTVCIRSFTDSSGA NIYLEKTGELRLLVPDGDGRPGRVQCFGLEQGGLFVEATPQQDIGRRTTGFQYELVRRHRASDLHELSAPCRP CSDTEVLLAVCTSDFAVRGSIQQVTHEPERQDSAIHLRVSRLYRQKSRVFEPVPEGDGHWQGRVRTLLECGVR PGHGDFLFTGHMHFGEARLGCAPRFKDFQRMYRDAQERGLNPCEVGTD

### QC Testing

Biological Activity: Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.

Purity: > 90% as determined by SDS-PAGE.

Endotoxin: < 1.0 EU/μg of the protein as determined by the LAL method.

Formulation: Tris-based buffer, 50% glycerol

### Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein Background

Hormone induced following exercise or cold exposure that promotes energy expenditure. Induced either in the skeletal muscle after exercise or in adipose tissue following cold exposure and is present in the circulation. Able to stimulate energy expenditure associated with the browning of the white fat depots and improves glucose tolerance. Does not promote an increase in a thermogenic gene program via direct action on adipocytes, but acts

by stimulating several immune cell subtypes to enter the adipose tissue and activate their prothermogenic actions. Stimulates an eosinophil-dependent increase in IL4 expression and promotes alternative activation of adipose tissue macrophages, which are required for the increased expression of the thermogenic and anti-inflammatory gene programs in fat. Required for some cold-induced thermogenic responses, suggesting a role in metabolic adaptations to cold temperatures.