

## Product datasheet for **TP310082L**

### DSU (MREG) (NM\_018000) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human melanoregulin (MREG), 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC210082 protein sequence <span style="color: red;">Red</span> =Cloning site <span style="color: green;">Green</span> =Tags(s)  MGLRDWLRTVCCCCRCECLEERALPEKEPLVSDNNPYSSFGATLVRDDEKNLWSPMPHDVSHTEADDDRT L YNLIVIRNQQAKDSEEWQKLNYDIHTLRQVRREVRNRWKCILEDLGFQKEADSLSVTKLSTISDSKNTR KAREMLLKLAETNIFPTSWELSERYLFVVDRLIALDAAEEFFKLARRTYPKKPGVPCLADGQKELHYLP FPSP  <span style="color: red;">TR</span> <span style="color: green;">TRPLEQKLISEEDLAANDILDYKDDDDKV</span>
Tag:	C-Myc/DDK
Predicted MW:	24.7 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	<u><a href="#">NP_060470</a></u>
Locus ID:	55686


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UniProt ID: [Q8N565](#)

RefSeq Size: 3213

Cytogenetics: 2q35

RefSeq ORF: 642

Synonyms: DSU; WDT2

**Summary:** Probably functions as cargo-recognition protein that couples cytoplasmic vesicles to the transport machinery. Plays a role in hair pigmentation, a process that involves shedding of melanosome-containing vesicles from melanocytes, followed by phagocytosis of the melanosome-containing vesicles by keratinocytes. Functions on melanosomes as receptor for RILP and the complex formed by RILP and DCTN1, and thereby contributes to retrograde melanosome transport from the cell periphery to the center. Overexpression causes accumulation of late endosomes and/or lysosomes at the microtubule organising center (MTOC) at the center of the cell. Probably binds cholesterol and requires the presence of cholesterol in membranes to function in microtubule-mediated retrograde organelle transport. Binds phosphatidylinositol 3-phosphate, phosphatidylinositol 4-phosphate, phosphatidylinositol 5-phosphate and phosphatidylinositol 3,5-bisphosphate, but not phosphatidylinositol 3,4-bisphosphate or phosphatidylinositol 4,5-bisphosphate (By similarity). Required for normal phagosome clearing and normal activation of lysosomal enzymes in lysosomes from retinal pigment epithelium cells (PubMed:19240024). Required for normal degradation of the lipofuscin component N-retinylidene-N-retinylethanolamine (A2E) in the eye. May function in membrane fusion and regulate the biogenesis of disk membranes of photoreceptor rod cells (By similarity).[UniProtKB/Swiss-Prot Function]

## Product images:



Coomassie blue staining of purified MREG protein (Cat# [TP310082]). The protein was produced from HEK293T cells transfected with MREG cDNA clone (Cat# [RC210082]) using MegaTran 2.0 (Cat# [TT210002]).