

Bidirectional sugar transporter SWEET12 (SWEET12), Recombinant Protein

Cat RP08673

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant Arabidopsis thaliana Bidirectional sugar transporter SWEET12 (SWEET12), partial

Product Gene Name

SWEET12 recombinant protein

Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

Host

E Coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight

31,487 Da

Storage

Store at -20°C. For long-term storage, store at -20°C or -80°C. Store working aliquots at 4°C for up to one week. Repeated freezing and thawing is not recommended.

Protein Family

Bidirectional sugar transporter

NCBI Accession

NP_197755.1

NCBI GI

15237803

NCBI GenBank Nucleotide

NM_122271.3

NCBI GenID

832431

NCBI Official Full Name

bidirectional sugar transporter SWEET12-like protein

NCBI Official Symbol

SWEET12

NCBI Official Synonym Symbols

AtSWEET12; homolog of *Medicago truncatula* MTN3; MQM1.8; MQM1_8; MTN3

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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NCBI Protein Information

bidirectional sugar transporter SWEET12-like protein

NCBI Summary

Encodes a member of the SWEET sucrose efflux transporter family proteins.

UniProt Gene Name

SWEET12

UniProt Synonym Gene Names

AtSWEET12

UniProt Protein Name

Bidirectional sugar transporter SWEET12

UniProt Synonym Protein Names

MtN3-like protein

UniProt Primary Accession

O82587

UniProt Related Accession

O82587

UniProt Comments

Mediates both low-affinity uptake and efflux of sugar across the plasma membrane. Involved in phloem loading by mediating export from parenchyma cells feeding H⁺-coupled import into the sieve element/companion cell complex, thus contributing to the sucrose migration from sites of synthesis in the mesophyll to the phloem (PubMed:22157085, PubMed:25988582). Contributes to seed filling by triggering sucrose efflux involved in the transfer of sugars from seed coat to embryos (PubMed:25988582).

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