

# Bidirectional sugar transporter SWEET12 (SWEET12), Recombinant Protein

Cat      *RP08673*

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## 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 GeneID

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**

# Bidirectional sugar transporter SWEET12 (SWEET12), Recombinant Protein

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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<sup>+</sup>-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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