Protein SENSITIVE TO PROTON RHIZOTOXICITY 1 (STOP1), Recombinant Protein

CD BioSciences
Plant Protein

Cat *RP05138*

Size *0.02 mg (E-Coli)/ 0.02 mg (Yeast)/ 0.1 mg (E-Coli)/ 0.1 mg (Yeast)/ 0.02 mg (Baculovirus)/ 0.02 mg (Mammalian-Cell)/ 0.1 mg (Baculovirus)/ 1 mg (E-Coli)/ 0.1 mg (Mammalian-Cell)/ 1 mg (Yeast)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)*

Species
Arabidopsis thaliana (Mouse-ear cress)

Full Product Name
Recombinant Arabidopsis thaliana Protein SENSITIVE TO PROTON RHIZOTOXICITY 1 (STOP1)

Product Gene Name
STOP1 recombinant protein

Product Synonym Gene Name
STOP1

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

Sequence
METEDDLCNT NWGSSSSKSR EPGSSDCGNS TFAGFTSQQK WEDASILDYE MGVEPGLQES IQANVDFLQG VRAQAWDPRT MLSNLSFMEQ KIHQLQDLVH LLVGRGGQLQ GRQDELAAQQ QQLITTDLTS IIIQLISTAG SLLPSVKHNM STAPGPFTGQ PGSAVFPYVR EANNVASQSQ NNNNCGAREF DLPKPVLVDE REGHVVEEHE MKDEDDVEEG ENLPPGSYEI LQLEKEEILA PHTHFCTICG KGFKRDANLR MHMRGHGDEY KTAAALAKPN KESVPGSEPM LIKRYSCPFL GCKRNKEHKK FQPLKTILCV KNHYKRTHCD KSFTCSRCHT KKFSVIADLK THEKHCGKNK WLCSCGTTFS RKDKLFGHIA LFQGHTPAIP LEETKPSAST STQRGSSEGG NNNQGMVGFN LGSASNANQE TTQPGMTDGR ICFEESFSPM NFDTCNFGGF HEFPRLMFDD SESSFQMLIA NACGFSPRNV GESVSDTSL

Sequence Positions
1-499, Full length protein

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

Host
E Coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight
55,207 Da

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

Protein Family
Protein SENSITIVE TO PROTON RHIZOTOXICITY

NCBI Accession
NP_174697.1

NCBI GI
15218606

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

Address: SUITE 209, 17 Ramsey Road, Shirley, NY 11967
Tel: 1-631-637-0420
E-mail: info@cd-biosci.com
https://www.cd-biosciences.com/plant-protein/

Protein SENSITIVE TO PROTON RHIZOTOXICITY 1 (STOP1), Recombinant Protein

CD BioSciences
Plant Protein

Cat *RP05138*

Size *0.02 mg (E-Coli)/ 0.02 mg (Yeast)/ 0.1 mg (E-Coli)/ 0.1 mg (Yeast)/ 0.02 mg (Baculovirus)/ 0.02 mg (Mammalian-Cell)/ 0.1 mg (Baculovirus)/ 1 mg (E-Coli)/ 0.1 mg (Mammalian-Cell)/ 1 mg (Yeast)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)*

NCBI GenBank Nucleotide
NM_103160.5

NCBI GeneID
840339

NCBI Official Full Name
C2H2 and C2HC zinc fingers superfamily protein

NCBI Official Symbol
STOP1

NCBI Official Synonym Symbols
AtSTOP1; F7P12.7; F7P12_7; sensitive to proton rhizotoxicity 1

NCBI Protein Information
C2H2 and C2HC zinc fingers superfamily protein

NCBI Summary
Encodes a putative nuclear Cys(2)His(2)-type zinc finger protein involved in H+ and Al3+ rhizotoxicity. In mutants exposed to aluminum stress, there is no induction of AtALMT1, an malate transporter known to be involved in the mediation of aluminum toxicity. Cell wall of the mutant is unstable in low pH medium (pH 4.5) in low Ca solution. This would mediate Ca-alleviation of low pH stress through pectin-Ca interaction.

UniProt Gene Name
STOP1

UniProt Protein Name
Protein SENSITIVE TO PROTON RHIZOTOXICITY 1

UniProt Synonym Protein Names
Zinc finger protein STOP1

UniProt Primary Accession
Q9C8N5

UniProt Secondary Accession
Q8LA79; A5A8C1

UniProt Related Accession
Q9C8N5

UniProt Comments
Probable transcription factor. Together with STOP2, plays a critical role in tolerance to major stress factors in acid soils such as proton H+ and aluminum ion Al3+. Required for the expression of genes in response to acidic stress (e.g. ALMT1 and MATE), and Al-activated citrate exudation.

Address: SUITE 209, 17 Ramsey Road, Shirley, NY 11967
Tel: 1-631-637-0420
E-mail: info@cd-biosci.com
https://www.cd-biosciences.com/plant-protein/