

GPI-anchored protein LORELEI (LRE), Recombinant Protein

Cat RP00255

Size 0.02 mg (E-Coli)/ 0.1 mg (E-Coli)/ 0.02 mg (Yeast)/ 0.1 mg (Yeast)/ 0.02 mg (Baculovirus)/ 1 mg (E-Coli)/ 0.02 mg

Species (Mammalian-Cell)/ 0.1 mg (Baculovirus)/ 1 mg (Yeast)/ 0.1 mg (Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)
Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant Arabidopsis thaliana GPI-anchored protein LORELEI (LRE)

Product Gene Name

LRE recombinant protein

Purity

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

Sequence

SSISDGVFES QTSVSGRNLR HAKKKCEVNF EYMDYKVLTK RCKGPAFPAK ECCSAFKEFA CPYVSQINDM
NSDCAQTMFS YMNIYGNYPY GLFANECECRER KDGLVCPLPP LYSHNLNAS

Sequence Positions

21-139, 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

18,337 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

GPI-anchored protein

NCBI Accession

NP_001119062.1

NCBI GI

186513806

NCBI GenBank Nucleotide

NM_001125590.2

NCBI GeneID

6240393

NCBI Official Full Name

lorelei

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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(Mammalian-Cell)/ 0.1 mg (Baculovirus)/ 1 mg (Yeast)/ 0.1 mg (Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)

NCBI Official Symbol

LRE

NCBI Official Synonym Symbols

LORELEI

NCBI Protein Information

lorelei

NCBI Summary

Encodes a membrane localized (putative GPI-anchored) protein involved in fertilization. Loss of function mutations display defects in fertilization-around 25% of embryo sacs abort.

UniProt Gene Name

LRE

UniProt Protein Name

GPI-anchored protein LORELEI

UniProt Primary Accession

B3GS44

UniProt Secondary Accession

A0A0G7ZNQ5

UniProt Related Accession

B3GS44

UniProt Comments

Female gametophyte-specific component of the signaling pathway required for fertilization. Required for reception of the pollen tube by the female gametophyte (PubMed:19028964, PubMed:26052747, PubMed:27081182). Acts specifically at the synergid cell surface for pollen tube reception (PubMed:26052747, PubMed:27081182). Plays a role in double fertilization and early seed development (PubMed:20163554). Component of the FER-regulated Rho GTPase signaling complex. Acts as a chaperone and coreceptor for FER. Required for localization of FER to the plasma membrane (PubMed:26052747).

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