

Two-component response regulator-like APRR9 (APRR9), Recombinant Protein

Cat *RP05474*

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 Two-component response regulator-like APRR9 (APRR9)

Product Gene Name

APRR9 recombinant protein

Product Synonym Gene Name

APRR9

Purity

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

Sequence

MGEIVVLSSD DGMETIKNRV KSSEVVQWEK YLPKTVLRVL LVESDYSTRQ IITALLRKCC YKVVAVSDGL
AAWEVLKEKS HNIDLITEL DLPSISGFAL LALVMEHEAC KNIPVIMMSS QDSIKMVLKC MLRGAADYLI
KPMRKNELKN LWQHVVRRLT LRDDPTAHAQ SLPASQHNLE DTDETCEDSR YHSDQGSGAQ AINYNGHNKL
MENGKSVDER DEFKETFDVT MDLIGGIDKR PDSIYKDKSR DECVGPGLGL SLKRSCSVSF ENQDESKHQK
LSLSDASAFS RFEESKSAEK AVVALEESTS GEPKTPTESH EKLRKVTSDQ GSATTSSNQE NIGSSSVSFR
NQVLQSTVTN QKQDSPIPVE SNREKAASKE VEAGSQSTNE GIAGQSSSTE KPKEEESAKQ RWSRSQREAA
LMKFRLKRKD RCFDKKVRYQ SRKKLAEQRP RVKGQFVRTV NSDASTKS

Sequence Positions

1-468, 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

52,565 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

Two-component response regulator

NCBI Accession

NP_001325091.1

NCBI GI

1063707025

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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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_001337214.1

NCBI GeneID

819292

NCBI Official Full Name

pseudo-response regulator 9

NCBI Official Symbol

PRR9

NCBI Official Synonym Symbols

APRR9; Arabidopsis pseudo-response regulator 9; F19D11.7; pseudo-response regulator 9; TL1; TOC1-LIKE PROTEIN 1

NCBI Protein Information

pseudo-response regulator 9

NCBI Summary

Pseudo-response regulator PRR9. Involved in clock function. PRR7 and PRR9 are partially redundant essential components of a temperature-sensitive circadian system. CCA1 and LHY had a positive effect on PRR9. Interact with TOC1 in a yeast two-hybrid assay. Acts as transcriptional repressor of CCA1 and LHY.

UniProt Gene Name

APRR9

UniProt Protein Name

Two-component response regulator-like APRR9

UniProt Synonym Protein Names

Pseudo-response regulator 9

UniProt Primary Accession

Q8L500

UniProt Secondary Accession

O81035; Q9LKL1

UniProt Related Accession

Q8L500

UniProt Comments

Transcriptional repressor of CCA1 and LHY, and positive regulator of LWD1 and LWD2 expression. Controls photoperiodic flowering response and temperature compensation. Involved in the positive and negative feedback loops of the circadian clock. Expression of several members of the ARR-like family is controlled by circadian rhythm. Regulated at the transcriptional level by a corepressor complex consisting of ELF4, ELF3, and LUX. APRR9, APRR7, and APRR5 coordinately act on the upstream region of the target genes to repress their expression from noon until midnight. The particular coordinated sequential expression of APRR9, APRR7,

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mg (Baculovirus)/ 1 mg (E-Coli)/ 0.1 mg (Mammalian-Cell)/ 1
APRR5, APRR3 and APRR1 result to circadian waves that may be at the basis of the endogenous circadian
clock. mg (Yeast)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)

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