

Calcium-dependent protein kinase 28 (CPK28), Recombinant Protein

Cat *RP04801*

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* Calcium-dependent protein kinase 28 (CPK28) , partial

Product Gene Name

CPK28 recombinant protein

Product Synonym Gene Name

CPK28

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

48,644 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

Calcium-dependent protein kinase

NCBI Accession

NP_001078806.1

NCBI GI

145334921

NCBI GenBank Nucleotide

NM_001085337.1

NCBI GeneID

836753

NCBI Official Full Name

calcium-dependent protein kinase 28

NCBI Official Symbol

CPK28

NCBI Official Synonym Symbols

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

Calcium-dependent protein kinase 28 (CPK28), Recombinant Protein

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calcium-dependent protein kinase 28; K2A18.29; K2A18_29

NCBI Protein Information

calcium-dependent protein kinase 28

NCBI Summary

member of Calcium Dependent Protein Kinase

UniProt Gene Name

CPK28

UniProt Protein Name

Calcium-dependent protein kinase 28

UniProt Primary Accession

Q9FKW4

UniProt Secondary Accession

Q0WNW9; Q8LDS1; A8MQP5

UniProt Related Accession

Q9FKW4

UniProt Comments

May play a role in signal transduction pathways that involve calcium as a second messenger (Probable). Acts as developmentally controlled regulator for coordinated stem elongation and vascular development. Acts as key component which contributes to the developmental switch that establishes the transition from vegetative to reproductive growth (PubMed:23252373). Involved in pathogen-associated molecular pattern (PAMP)-triggered immunity (PTI) signaling. Interacts with and phosphorylates the kinase BIK1, a central rate-limiting kinase in PTI signaling. Facilitates BIK1 turnover and negatively regulates BIK1-mediated immune responses triggered by several PAMPs. Its kinase activity is necessary and sufficient for its function in PTI signaling (PubMed:25525792).

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