

Protein ACCUMULATION AND REPLICATION OF CHLOROPLASTS 3 (ARC3), Recombinant Protein

Cat RP02427

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant Arabidopsis thaliana Protein ACCUMULATION AND REPLICATION OF CHLOROPLASTS 3 (ARC3) , partial

Product Gene Name

ARC3 recombinant protein

Product Synonym Gene Name

ARC3

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

82,583 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

Protein ACCUMULATION AND REPLICATION OF CHLOROPLASTS

NCBI Accession

NP_177638.2

NCBI GI

79380731

NCBI GenBank Nucleotide

NM_106158.5

NCBI GeneID

843839

NCBI Official Full Name

GTP binding protein

NCBI Official Symbol

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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Cat *RP02427*

ARC3

NCBI Official Synonym Symbols

ACCUMULATION AND REPLICATION OF CHLOROPLASTS 3; F25A4.3; F25A4_3

NCBI Protein Information

GTP binding protein

NCBI Summary

Encodes ARC3 (Accumulation and Replication of Chloroplast 3), a chloroplast division factor functioning in the initiation of chloroplast division. ARC3 is a chimera of the prokaryotic FtsZ and part of the eukaryotic phosphatidylinositol-4-phosphate 5-kinase (PIP5K). Located on the outer surface of the chloroplast in a ring-like structure at the early stage of chloroplast division. The arc3 mutant has a small number of abnormally large chloroplasts in the cell.

UniProt Gene Name

ARC3

UniProt Protein Name

Protein ACCUMULATION AND REPLICATION OF CHLOROPLASTS 3

UniProt Primary Accession

Q6F6B5

UniProt Secondary Accession

Q0WT28; Q9C9P7; Q9SSG9

UniProt Related Accession

Q6F6B5

UniProt Comments

Z-ring accessory protein involved in the initiation of plastid division and division site placement (might functionally replace bacterial MinC). May control the rate of chloroplast expansion. Seems to influence stromule (stroma-filled tubular extensions of the plastid envelope membrane) length and frequency.

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