

# ATP-dependent zinc metalloprotease FTSH 2 (FTSH2), Recombinant Protein

Cat *RP05297*

Size *0.02 mg/ 0.1 mg/ 5x0.1 mg*

## Species

*Arabidopsis thaliana* (Mouse-ear cress)

## Full Product Name

Recombinant *Arabidopsis thaliana* ATP-dependent zinc metalloprotease FTSH 2, chloroplastic (FTSH2)

## Product Gene Name

FTSH2 recombinant protein

## Product Synonym Gene Name

VAR2

## Purity

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

## Sequence

DEQGVSSSRM SYSRFLEYLD KDRVNKVDLY ENGTIAIVEA VSPELGNRVE RVRVQLPGLS QELLQKLRAK  
NIDFAAHNAQ EDQGSVLFNL IGNLAFALL IGLFLLSRR SGGGMGGPGG PGNPLQFGQS KAKFQMEPNT  
GVTFDDVAGV DEAKQDFMEV VEFLKKPERF TAVGAKIPKG VLLIGPPGTG KTLLAKAIAG EAGVPFFSIS  
GSEFVEMFVG VGASRVRLDF KKAKENAPCI VVDEIDAVG RQRGTGIGGG NDEREQTLNQ LITEMDGFEG  
NTGVIVVAAT NRADILDSAL LRPGRFDRQV SVDVPDVKGR TDILKVHAGN KKFDNDVSLE IIMRTPGFS  
GADLANLLNE AAILAGRRAR TSISSKEIDD SIDRIVAGME GTVMTDGKSK SLVAYHEVGH AVCGTLTPGH  
DAVQKVTLIP RGQARGLTWf IPSDDPTLIS KQQLFARIVG GLGGRAAEEI IFGDSEVTTG AVGDLQQITG  
LARQMVTTFG MSDIGPWSLM DSSAQSDVIM RMMARNMSME KLAEDIDSAV KKLSDSAYEI ALSHIKNNRE  
AMDKLVEVLL EKETIGGDEF RAILSEFTEI PPENRVPSST TTPASAPTP AAV

## Sequence Positions

83-695aa; full length protein

## Format

Liquid containing glycerol

## Host

Cell Free Expression

## Molecular Weight

74,157 Da

## Storage

Store at -20°C, for extended storage, conserve at -20°C or -80°C. Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

## Protein Family

ATP-dependent zinc metalloprotease

## NCBI Accession #

NP\_850156.1

## NCBI GI #

**FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY**

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30684767

## NCBI GenBank Nucleotide #

NM\_179825.2

## NCBI GeneID

817646

## NCBI Official Full Name

ATP-dependent zinc metalloprotease FTSH 2

## NCBI Official Symbol

VAR2

## NCBI Official Synonym Symbols

F7F1.16; F7F1\_16; FTSH2; VAR2; VARIEGATED 2

## NCBI Protein Information

ATP-dependent zinc metalloprotease FTSH 2

## NCBI Summary

Metalloprotease that functions in thylakoid membrane biogenesis. Involved in the repair of PSII following damaged incurred during photoinhibition. Forms a complex with VAR1. Mutants show a variegated phenotype, which decreases during development. Transcript and protein levels increase with light intensity.

## UniProt Gene Name

FTSH2

## UniProt Synonym Gene Names

VAR2; AtFTSH2

## UniProt Protein Name

ATP-dependent zinc metalloprotease FTSH 2, chloroplastic

## UniProt Synonym Protein Names

Protein VARIEGATED 2

## UniProt Entry Name

FTSH2\_ARATH

## UniProt Primary Accession #

O80860

## UniProt Secondary Accession #

Q56Z14; Q94AZ0

## UniProt Related Accession #

O80860

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## UniProt Comments

Part of a complex that function as an ATP-dependent zinc metallopeptidase. Involved in the thylakoid formation and in the removal of damaged D1 in the photosystem II, preventing cell death under high-intensity light conditions, but not involved in thermotolerance.

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