

# LRR receptor-like serine/threonine-protein kinase FLS2 (FLS2), Recombinant Protein

Cat RP01240

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)/ 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 LRR receptor-like serine/threonine-protein kinase FLS2 (FLS2) , partial

## Product Gene Name

FLS2 recombinant protein

## Product Synonym Gene Name

FLS2

## Purity

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

## Sequence

LTCKKKKEKK IENSSSESLP DLDSALKLKR FEPKELEQAT DSFNSANIIG SSSLSTVYKG QLEDGTVIIV  
KVLNLKEFSA ESDKWFYTEA KTLSQLKHRN LVKILGFAWE SGKTKALVLP FMENGNLEDT IHGSAPIGS  
LLEKIDLCVH IASGIDYLHS GYGFPVHCD LKPANILLDS DRVAHVSDFG TARILGFRED GSTTASTSAF  
EGTIGYLAPE FAYMRKVTTK ADVFSFGIIM MELMTKQRPT SLNDEDSQDM TLRQLVEKSI GNGRKGMVRV  
LDMELGDSIV SLKQEEAIED FLKLCFCTS SRPEDRPDMN EILTHLMKLR GKANSFREDR NEDREV

## Sequence Positions

828-1173aa; Cytoplasmic domain

## Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

## Host

E Coli or Yeast or Baculovirus or Mammalian Cell

## Molecular Weight

128,824 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

LRR receptor-like serine/threonine-protein kinase

## NCBI Accession #

NP\_001330009.1

## NCBI GI #

1063736481

## NCBI GenBank Nucleotide #

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

# LRR receptor-like serine/threonine-protein kinase FLS2 (FLS2), Recombinant Protein

Cat RP01240

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)/ 1 mg (Yeast)/ 0.1 mg (Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)  
NCBI GeneID  
834676

## NCBI Official Full Name

Leucine-rich receptor-like protein kinase family protein

## NCBI Official Symbol

FLS2

## NCBI Official Synonym Symbols

FLAGELLIN-SENSITIVE 2; MPL12.13; MPL12.8; MPL12\_13

## NCBI Protein Information

Leucine-rich receptor-like protein kinase family protein

## NCBI Summary

Encodes a leucine-rich repeat serine/threonine protein kinase that is expressed ubiquitously. FLS2 is involved in MAP kinase signalling relay involved in innate immunity. Essential in the perception of flagellin, a potent elicitor of the defense response. FLS2 is directed for degradation by the bacterial ubiquitin ligase AvrPtoB.

## UniProt Gene Name

FLS2

## UniProt Protein Name

LRR receptor-like serine/threonine-protein kinase FLS2

## UniProt Synonym Protein Names

Protein FLAGELLIN-SENSING 2; Protein FLAGELLIN-SENSITIVE 2

## UniProt Primary Accession #

Q9FL28

## UniProt Secondary Accession #

Q0WVN3; Q84WF4

## UniProt Related Accession #

Q9FL28

## UniProt Comments

Constitutes the pattern-recognition receptor (PPR) that determines the specific perception of flagellin (flg22), a potent elicitor of the defense response to pathogen-associated molecular patterns (PAMPs). Flagellin-binding to the receptor is the first step to initiate the innate immune MAP kinase signaling cascade (MEKK1, MKK4/MKK5 and MPK3/MPK6), resulting in enhanced resistance against pathogens. Binding to the effector AvrPto1 or to the phosphatase hopD2 from *Pseudomonas syringae* blocks the downstream plant immune response.

**FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY**