

# Probable WRKY transcription factor 8 (WRKY8), Recombinant Protein

Cat RP05071

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)  
Species Arabidopsis thaliana (Mouse-ear cress)

## Full Product Name

Recombinant Arabidopsis thaliana Probable WRKY transcription factor 8 (WRKY8)

## Product Gene Name

WRKY8 recombinant protein

## Product Synonym Gene Name

WRKY8

## Purity

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

## Sequence

MSHEIKDLNN YHYTSSYNHY NINNQNMINL PYVSGPSAYN ANMISSSQVG FDLPSKNLSP QGAFELGFEL  
SPSSSDFNP SLDQENGLYN AYNYNSSQKS HEVVGDCAT IKSEVRVSAS PSSSEADHHP GEDSGKIRKK  
REVRDGGEDD QRSQKVVKTK KKEKKKEPR VSFMTKTEVD HLEDGYRWRK YGQKAVKNSP YPRSYRCTT  
QKCNVKKRVE RSYQDPTVVI TYESQHNHP IPTNRRTAMF SGTTASDYNP SSSPIFSDLI INTPRSFSND  
DLFRVPYASV NVNPSYHQQQ HGFHQQESEF ELLKEMFPSV FFKQEP

## Sequence Positions

1-326, 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

37,294 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

Probable WRKY transcription factor

## NCBI Accession #

NP\_199447.1

## NCBI GI #

15237428

## NCBI GenBank Nucleotide #

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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mg (Baculovirus)/ 1 mg (E-Coli)/ 1 mg (Yeast)/ 0.1 mg (Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)  
NM\_124005.3  
**NCBI GeneID**  
834678

## NCBI Official Full Name

WRKY DNA-binding protein 8

## NCBI Official Symbol

WRKY8

## NCBI Official Synonym Symbols

ARABIDOPSIS THALIANA WRKY DNA-BINDING PROTEIN 8; ATWRKY8; MPL12.15; MPL12\_15; WRKY DNA-binding protein 8

## NCBI Protein Information

WRKY DNA-binding protein 8

## NCBI Summary

member of WRKY Transcription Factor; Group II-c

## UniProt Gene Name

WRKY8

## UniProt Protein Name

Probable WRKY transcription factor 8

## UniProt Synonym Protein Names

WRKY DNA-binding protein 8

## UniProt Primary Accession #

Q9FL26

## UniProt Related Accession #

Q9FL26

## UniProt Comments

Transcription factor. Interacts specifically with the W box (5'-TTGAC[CT]-3'), a frequently occurring stress-responsive cis-acting element. Functions as positive regulator of salt stress response. Binds the W box of LTI78/RD29A stress-response gene and directly regulates its transcription under salt stress. Functions antagonistically with VQ9 to regulate sodium and potassium homeostasis under salt stress by regulating the expression of downstream SOS (SALT OVERLY SENSITIVE) stress-responsive genes. The DNA-binding activity of WRKY8 is decreased by VQ9 (PubMed:23451802). Functions as negative regulator of basal resistance to the bacterial pathogen *P. syringae* and as positive regulator of resistance to the fungal pathogen to *B. cinerea* (PubMed:20367464). Functions as positive regulator of defense response against tobamovirus (TMV) by regulating both the abscisic acid and ethylene signaling pathways. Positively regulates ABI4 expression and negatively modulates ACS6 and ERF104 expression by directly binding to the W box consensus motifs within their promoters (PubMed:23650359).

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