

# Homeotic protein knotted-1 (KN-1), Recombinant Protein

Cat RP10442

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  
**Species** (Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-  
Zea mays (Maize)  
Cell)

## Full Product Name

Recombinant Zea mays Homeotic protein knotted-1 (KN-1)

## Product Gene Name

KN-1 recombinant protein

## Purity

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

## Sequence

MEEITQHFGV GASSHGHGHG QHHHHHHHHH PWASSLSAVV APLPPQPPSA GLPLTLNTVA ATGNSGGSGN  
PVLQLANGGG LLDACVKAKE PSSSSPYAGD VEAIAKAKIIS HPHYSSLTA YLECNKVGAP PEVSARLTEI  
AQEVEARQRT ALGGLAAATE PELDQFMEAY HEMLVKFREE LTRPLQEAME FMRRVESQLN SLSISGRSLR  
NILSSGSSEE DQEGSGGETE LPEVDAHGVD QELKHLLKK YSGYLSSLKQ ELSKKKKKGGK LPKEARQQLL  
SWWDQHYKWP YPSETQKVAL AESTGLDLKQ INNWFINQRK RHWKPSEEMH HLMMDGYHTT NAFYMDGHFI  
NDGGLYRLG

## Sequence Positions

1-359, 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

39,827 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

Homeotic protein

## NCBI Accession #

NP\_001266662.2

## NCBI GI #

1119202013

## NCBI GenBank Nucleotide #

NM\_001279733.2

## NCBI GeneID

542391

**FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY**

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(Yeast)/ 0.02 mg (Baculovirus)/ 0.02 mg (Mammalian-Cell)/ 0.1

mg (Baculovirus)/ 1 mg (E-Coli)/ 1 mg (Yeast)/ 0.1 mg  
**NCBI Official Full Name**  
(Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-  
Cell)  
homeotic protein knotted-1

## NCBI Official Symbol

kn1

## NCBI Official Synonym Symbols

KN-1; GRMZM2G017087

## NCBI Protein Information

homeotic protein knotted-1

## UniProt Gene Name

KN-1

## UniProt Protein Name

Homeotic protein knotted-1

## UniProt Primary Accession #

P24345

## UniProt Related Accession #

P24345

## UniProt Comments

Binds to RNA (PubMed:17965274). Possible transcription factor that regulates genes involved in development. Mutations in KN-1 alter leaf development. Foci of cells along the lateral vein do not differentiate properly but continue to divide, forming knots. May participate in the switch from indeterminate to determinate cell fates. Probably binds to the DNA sequence 5'-TGAC-3'.

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