

# Protein SCAR2 (SCAR2), Recombinant Protein

Cat *RP05485*

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## Species

*Arabidopsis thaliana* (Mouse-ear cress)

## Full Product Name

Recombinant *Arabidopsis thaliana* Protein SCAR2 (SCAR2) , partial

## Product Gene Name

SCAR2 recombinant protein

## Product Synonym Gene Name

SCAR2

## 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

151,585 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

## NCBI Accession #

NP\_181378.2

## NCBI GI #

30687512

## NCBI GenBank Nucleotide #

NM\_129400.3

## NCBI GeneID

818425

## NCBI Official Full Name

SCAR homolog 2

## NCBI Official Symbol

SCAR2

## NCBI Official Synonym Symbols

**FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY**

# Protein SCAR2 (SCAR2), Recombinant Protein

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ATSCAR2; DIS3; IRREGULAR TRICHOME BRANCH1; IRREGULAR TRICHOME BRANCH1; ITB1; SCAR homolog 2; SCAR HOMOLOG 2; T19C21.7; T19C21\_7; WAVE4

## NCBI Protein Information

SCAR homolog 2

## NCBI Summary

Encodes a subunit of the WAVE complex. The WAVE complex is required for activation of ARP2/3 complex which functions in actin microfilament nucleation and branching. Mutations cause defects in both the actin and microtubule cytoskeletons that result in aberrant epidermal cell expansion. *itb1* mutants showed irregularities in trichome branch positioning and expansion. The SHD domain of this protein binds to BRK1 and overexpression of the SHD domain results in a dominant negative phenotype.

## UniProt Gene Name

SCAR2

## UniProt Synonym Gene Names

DIS3; ITB1; WAVE4; AtSCAR2

## UniProt Protein Name

Protein SCAR2

## UniProt Synonym Protein Names

Protein DISTORTED 3; Protein IRREGULAR TRICHOME BRANCH 1; Protein WAVE4

## UniProt Primary Accession #

Q5XPJ9

## UniProt Secondary Accession #

O80907

## UniProt Related Accession #

Q5XPJ9

## UniProt Comments

Involved in regulation of actin and microtubule organization. Part of a WAVE complex that activates the Arp2/3 complex. Regulates trichome branch positioning and expansion.

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