

ARPC2 Blocking Peptide (C-term)

Synthetic peptide Catalog # BP20763c

Specification

ARPC2 Blocking Peptide (C-term) - Product Information

Primary Accession <u>O15144</u>

Other Accession P85970, O9CVB6, O3MHR7

ARPC2 Blocking Peptide (C-term) - Additional Information

Gene ID 10109

Other Names

Actin-related protein 2/3 complex subunit 2, Arp2/3 complex 34 kDa subunit, p34-ARC, ARPC2, ARC34

Target/Specificity

The synthetic peptide sequence is selected from aa 278-291 of HUMAN ARPC2

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ARPC2 Blocking Peptide (C-term) - Protein Information

Name ARPC2

Synonyms ARC34

Function

Actin-binding component of the Arp2/3 complex, a multiprotein complex that mediates actin polymerization upon stimulation by nucleation-promoting factor (NPF) (PubMed:9230079). The Arp2/3 complex mediates the formation of branched actin networks in the cytoplasm, providing the force for cell motility (PubMed:9230079" target="_blank">9230079" target="_blank">9230079). Seems to contact the mother actin filament (PubMed:9230079). In addition to its role in the cytoplasmic cytoskeleton, the Arp2/3 complex also promotes actin polymerization in the nucleus, thereby regulating gene transcription and repair of damaged DNA (PubMed:29925947). The Arp2/3 complex promotes homologous recombination (HR) repair in response to DNA damage by



promoting nuclear actin polymerization, leading to drive motility of double-strand breaks (DSBs) (PubMed:29925947).

Cellular Location

Cytoplasm, cytoskeleton. Cell projection. Synapse, synaptosome {ECO:0000250|UniProtKB:Q9CVB6}. Nucleus

ARPC2 Blocking Peptide (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides

ARPC2 Blocking Peptide (C-term) - Images

ARPC2 Blocking Peptide (C-term) - Background

Functions as actin-binding component of the Arp2/3 complex which is involved in regulation of actin polymerization and together with an activating nucleation-promoting factor (NPF) mediates the formation of branched actin networks. Seems to contact the mother actin filament.

ARPC2 Blocking Peptide (C-term) - References

Welch M.D., et al.J. Cell Biol. 138:375-384(1997). Couch F.J., et al.Genomics 36:86-99(1996). Kalnine N., et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Gevaert K., et al.Nat. Biotechnol. 21:566-569(2003). Zhang C., et al.Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.