

Anti-Phospho CHMP4C [pCHMP4C]

Catalogue number: 151827

Sub-type:

Images:

Contributor

Inventor: P Paolo D'Avino

Institute: University of Cambridge

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-Phospho CHMP4C [pCHMP4C]

Alternate name:

Class: Polyclonal

Conjugate: Unconjugated

Description: Borealin interacts directly with Snf7/Shrb/CHMP4 components in both Drosophila and human cells and the two proteins colocalize at the midbody in late cytokinesis. Aurora B phosphorylates CHMP4C at three serine residues located in its C-terminal linker region, a part of the protein known to regulate its ability to form polymers and interact with the membrane. Over-expression of CHMP4C variants mutated in these three residues caused cytokinesis failure, suggesting that Aurora B inhibits CHMP4C activity during cytokinesis. It is proposed that CPC controls abscission timing in both flies and human cells by regulating the function of ESCRT-III Snf7 proteins during cytokinesis through the interaction of its Borealin component with the N-terminus of Shrb/CHMP4 proteins and Aurora B-mediated phosphorylation of the CHMP4C regulatory linker tail.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype:

Reactivity: Mammalian

Selectivity:

Host: Rabbit

Immunogen: Synthetic peptide (TARRSRAASSQRAEEC)

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls: Synchronised HeLa cell extracts. Signals are absent in a twin blot that had been pre-incubated with lambda-phosphatase, indicating that the antibody specifically recognizes a phosphorylated form of CHMP4C.

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: Phospho charged multi vesicular protein 4c

Target alternate names:

Target background: Borealin interacts directly with Snf7/Shrb/CHMP4 components in both Drosophila and human cells and the two proteins colocalize at the midbody in late cytokinesis. Aurora B phosphorylates CHMP4C at three serine residues located in its C-terminal linker region, a part of the protein known to regulate its ability to form polymers and interact with the membrane. Over-expression of CHMP4C variants mutated in these three residues caused cytokinesis failure, suggesting that Aurora B inhibits CHMP4C activity during cytokinesis. It is proposed that CPC controls abscission timing in both flies and human cells by regulating the function of ESCRT-III Snf7 proteins during cytokinesis through the interaction of its Borealin component with the N-terminus of Shrb/CHMP4 proteins and Aurora B-mediated phosphorylation of the CHMP4C regulatory linker tail.

Molecular weight: ~30

Ic50:

Applications

Application: WB

Application notes:

Handling

Format: Liquid

Concentration: 0.9-1.1mg/ml

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer: PBS with 0.02% azide

Storage conditions: -20° C

Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References:

CancerTools.org