3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Anti-FIP200 (C-terminal)

produced in rabbit, affinity isolated antibody

Product Number SAB4200135

Product Description

Anti-FIP200 (C-terminal) is produced in rabbit using as the immunogen a synthetic peptide corresponding to a sequence at the C-terminal of human FIP200 (GeneID: 9821), conjugated to KLH. The corresponding sequence is identical in mouse, rat, monkey, bovine, and canine FIP200. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-FIP200 (C-terminal) recognizes human FIP200. The antibody may be used in several immunochemical techniques including immunoblotting (~200 kDa). Detection of the FIP200 band by immunoblotting is specifically inhibited by the immunizing peptide.

FIP200 (focal adhesion kinase family interacting protein of 200 kDa), also named RB1CC1 (retinoblastoma 1-inducible coiled-coil 1), is a multifunctional protein involved in the regulation of cell growth, cell proliferation, cell survival, cell adhesion, and cell migration. Deficiency in FIP200 is associated with embryonic death and cancer development. FIP200 interacts with several proteins including Pyk2, FAK, TSC1, p53, ASK1, and TRAF2.

It also interacts with ULK1 and is essential for autophagy. FIP200 and ULK1 form a stable complex with Atg13 and Atg101, an Atg13-binding protein which is not regulated by nutrient conditions. FIP200, ULK1, Atg13 and Atg101 mainly localize in the cytoplasm and associate with the isolation membrane upon autophagy induction. ULK1-Atg13-FIP200-Atg101 complexes directly interact with mTOR and mediate mTOR signaling to the autophagy machinery.¹⁻⁶

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~1.0 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at –20 °C. For continuous use, store at 2–8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

 $\frac{Immunoblotting}{Immunoblotting}: a working concentration of 1-2 \ \mu g/mL is recommended using whole extracts of HEK-293 cells overexpressing human FIP200.$

<u>Note</u>: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

- 1. Hara, T. et al., *J. Cell Biol.*, **181**, 497-510 (2008).
- Gan, B., and Guan, J.L., Cell Signal., 20, 787-794 (2008).
- 3. Hosokawa, N. et al., *Mol. Biol. Cell*, **20**, 1981-1991 (2009).
- 4. Jung, C.H. et al., *Mol. Biol. Cell*, **20**, 1992-2003 (2009).
- Mizushima, N., Curr. Opin. Cell Biol., 22, 1-8 (2009).
- 6. Hosokawa, N. et al., Autophagy, 5, 1-7 (2009).

VS,ST,SC,BR,PHC,MAM 06/19-1