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phospho-arfaptin 2 (Ser260) Rabbit pAb

Catalog # AP98155

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P53365
Other Accession	P53365
Reactivity	Human
Predicted	Rat, Mouse, Rabbit, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37856
Physical State	Liquid
Immunogen	KLH conjugated Synthesised phosphopeptide derived from human arfaptin 2 around the phosphorylation site of Ser260
Epitope Specificity	LE(p-S)AQ
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 AH domain.
SUBUNIT	Interacts with RAC1 by binding directly to it. Specifically binds to GTP-bound ARF1 and ARF6, but binds to RAC1.GTP and RAC1.GDP with similar affinities. Directly interacts with ARL1 GTP-bound form; this interaction leads to a > 4-fold increase in the amount of ARL1-bound GTP at steady state level.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	ARFIP2 is a ubiquitously expressed protein implicated in mediating cross talk between RAC and ARF small GTPases. It has been shown that ARFIP2 binds specifically to GTP-bound ARF1 and ARF6, but binds to Rac-GTP and Rac-GDP with similar affinities. The X-ray structure of arfaptin reveals an elongated, crescent-shaped dimer of 3-helix coiled-coils. Structures of arfaptin with Rac bound to either GDP or the slowly hydrolysable analog GMPPNP show that the switch regions adopt similar conformations in both complexes.

Additional Information

Gene ID	23647
Other Names	POR1; 2310002N04Rik; POR; ARFP2_HUMAN; ARFIP2; ADP-ribosylation factor-interacting protein 2; Partner of RAC1 (POR1); ARFP2_MOUSE; ARFP2_RAT; ARF interacting protein 2; ADP ribosylation factor interacting protein 2; arfaptin 2; ARFIP2 | Arfaptin-2 (phospho-S260); p-Arfaptin-2; phospho-Arfaptin-2; p-ARFIP2; ARFIP2 | Arfaptin-2 (phospho-Ser260)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	ARFIP2 {ECO:0000303|PubMed:30917996, ECO:0000312|HGNC:HGNC:17160}
Function	Plays a role in constitutive metalloproteinase (MMP) secretion from the trans Golgi network (PubMed:26507660). May have important functions during vesicle biogenesis at certain cargo subdomains, which could be predominantly utilized by secreted MMPs, such as MMP7 and MMP2 (PubMed:26507660). Also involved in autophagy by regulating the starvation-dependent trafficking of ATG9A vesicles which deliver the phosphatidylinositol 4-kinase beta (PI4KB) to the autophagosome initiation site (PubMed:30917996, PubMed:31204568). Involved in phagophore growth during mitophagy by regulating ATG9A trafficking to mitochondria (PubMed:33773106). In addition, plays a role in NF-kappa-B inhibition by interacting with IKBKB and IKBKG (PubMed:26296658).
Cellular Location	Golgi apparatus. Golgi apparatus, trans-Golgi network membrane

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.