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ProductInformation

ANTI-ADP RIBOSYLATION FACTOR 1/3 (ARF 1/3)
Developed in Sheep,
IgG Fraction of Antiserum

Product Number **A 4594**

Product Description

Anti-ADP Ribosylation Factor 1/3 is developed in sheep using with a 15 amino-acid peptide (98-112, ERVNEA-REELMRMLA) selected for maximal sequence homology with human ARF 1 and 3, but minimal sequence homology to other known ARF's as immunogen. The sheep antiserum is purified using DEAE to provide the IgG fraction.

Anti-ADP Ribosylation Factor 1/3 detects AFR 1 and ARF 3 (21 kDa) by immunoblotting. This antibody reacts with mouse and human ARF 1/3.

Anti-ADP Ribosylation Factor 1/3 may be used for the dection of ADP Ribosylation Factor 1/3 in human and mouse by immunoblot ting.

ADP ribosylation factors (ARFs)[1] are small G proteins of the Ras superfamily involved in intracellular trafficking.[1, 2] ARF1 functions in the formation of transport vesicles.[3, 4] ARF1 controls the binding to Golgi membranes of coatomer, a large (700 kDa) cytoplasmic complex, which upon oligomerization deforms the lipid bilayer and induces the formation of "COPI"-coated vesicles.[3, 4] In addition, ARF1 activates phospholipase D.[5, 6] ARF1 may recruit coatomer to the membrane based on the ability of ARF1 to interact directly, simultaneously, and in a GTP-dependent manner both with its protein target and with lipid membranes. This dual interaction can be ascribed to two regions of ARF1. The classical switch I and II regions of the "Ras-like" core domain of ARF1 are probably the main determinants of its interaction with coatomer,[7] whereas the interaction of ARF1 with membrane lipids involves a region specific to ARF1: the N-terminal -helix, which is amphipathic and myristoylated.[8-11] Three human ARF genes have been isolated that share high homology: 96% between ARF1 and 3; 84% between both ARF3 and 4 and ARF 1 and 4. There is consistency between ARFs between species.

Reagants

Anti-ADP Ribosylation Factor 1/3 is supplied as the IgG fraction of antiserum in glycine buffered saline, containing 0.1% EACA, 0.01% benzamidine, 1 mM EDTA, and 0.1% sodium azide.

Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

Storage/Stability

Store at 2-8°C. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

Recommended working dilution is 1:500-1:2,000 by immunoblotting using RIPA lysates of mouse brain cells, anti-sheep IgG conjugate to Peroxidase and enhanced chemiluminescence.

Note**:** In order to obtain best results and assay sensitivity in different techniques and preparations we recommend determining optimal working dilutions by titration test.

References

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