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Product Information

Anti-RASD1
produced in rabbit, affinity isolated antibody

Catalog Number **SAB4200487**

Product Description
Anti-RASD1 is produced in rabbit using as immunogen a synthetic peptide corresponding to an internal region of human RASD1 (GeneID: 51655), conjugated to KLH. The corresponding sequence is identical in mouse and rat RASD1. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-RASD1 specifically recognizes human RASD1. The antibody may be used in various immunochemical techniques including immunoblotting (~32 kDa). Detection of the RASD1 band by immunoblotting is specifically inhibited by the RASD1 immunizing peptide.

RASD1 (also known as DexRas1, AGS1) is a member of the family of Ras small G-proteins and was initially identified as a dexamethasone inducible gene.[1,2] RASD1/Dexras1 has been reported to regulate several distinct signaling pathways including NMDAR-nitric oxide, G-protein coupled receptors (GPCRs) and signaling pathways involving MAPK and PKC.[3-6] Dexras1 is S-nitrosylated and activated by NO donors and by NMDA receptor-stimulated NO-synthesis in cortical neurons. It has been suggested that Dexras/RASD1 is a novel physiological target of neuronal NOS (nNOS). The formation of a ternary complex between nNOS, the nNOS adaptor protein CAPON and DexRAS1 has been shown to enhance the ability of nNOS to activate Dexras1.[3] Knock-out of nNOS in mice results in selective decrease of Dexras1 activation. NMDA receptor-stimulated NO-signaling has been shown to mediate neuronal iron homeostasis via Dexras1. An iron-uptake signaling cascade including NMDA-NO-Dexras1-PAP7-DNMT1 is thought to mediate NMDA neurotoxicity.[7] Dexras1 interacts with FE65 and can direct modulate FE65-APP-mediated transcription.[8]

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
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability
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
Immunoblotting: a working concentration of 1-2 µg/mL is recommended using cell lysates of HEK-293T over-expressing human RASD1.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References
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