Ras-GRF1 (Phospho-Ser916) Antibody

Catalog No: #11678

Package Size: #11678-1 50ul #11678-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

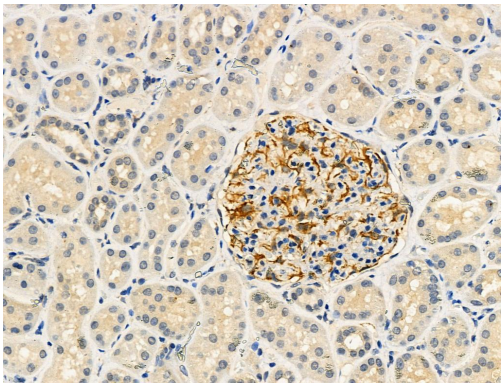
Description

Product Name	Ras-GRF1 (Phospho-Ser916) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Applications	IHC
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous levels of Ras-GRF1 only when phosphorylated at serine 916.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of Serine 916(R-M-S(p)-L-A) derived from Mouse Ras-GRF1.
Target Name	Ras-GRF1
Modification	Phospho
Other Names	CDC25; GNRP; GRF1; RASGRF1;
Accession No.	Swiss-Prot#: Q13972; NCBI Gene#: 5923; NCBI Protein#: NP_002882.3.
Uniprot	Q13972
GeneID	5923;
SDS-PAGE MW	145kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C/1 year

Application Details

Immunohistochemistry: 1:50~1:100

Images



Immunohistochemical analysis of paraffin-embedded Human kidney cancer using Ras-GRF1 (Phospho-Ser916) antibody #11678.

Background

Ras activity is regulated by GAP (GTPase activating proteins) and GEFs (guanine nucleotide exchange factors). Ras-GRF1 (also known as CDC25Mm) is neuronal RasGEF and is regulated by heterotrimeric G proteins and calcium influx . Binding to calmodulin and phosphorylation stimulate Ras-GRF1 activity. Multiple PKA phosphorylation sites on Ras-GRF have been identified. Phosphorylation on the two major sites, Ser54 and Ser822, inhibits Ras-GRF activity. Carbachol (a muscarinic agonist)-induced phosphorylation on Ser916 is essential but not sufficient for maximal Ras-GRF activity.

Huibin Yang, J. Biol. Chem., Apr 2003; 278: 13278 - 13285.
Huibin Yang, Mol. Biol. Cell, May 2006; 17: 2177 - 2189.
Raymond R. Mattingly, J. Biol. Chem., Dec 1999; 274: 37379.
Tie-Nian Zhu, J. Biol. Chem., May 2007; 282: 14816 - 14826.

Note: This product is for in vitro research use only