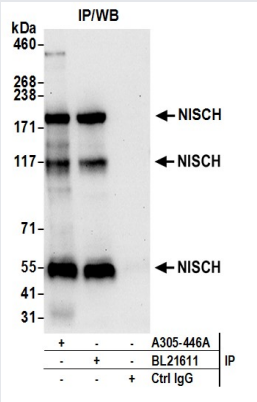
NISCH Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	NISCH, Polyclonal Antibody
Full Product Name	Rabbit anti-NISCH Antibody, Affinity Purified
Product Gene Name	anti-NISCH antibody
Product Synonym Names	I1R; IRAS; IR1; Imidazoline-1 receptor candidate protein; Imidazoline receptor antisera-selected protein; Imidazoline-1 receptor; nischarin; I1R candidate protein; I-1 receptor candidate protein; I-1; hIRAS; imidazoline receptor 1; imidazoline receptor antisera selected; Nischarin; nischarin
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human
Form/Format	Liquid. Whole IgG. Tris-citrate/phosphate buffer, pH 7 to 8 containing 0.09% Sodium Azide
Purity/Purification	Antigen Affinity Purified
Concentration	1000ug/ml (lot specific)
Preparation and Storage	Store at 2-8 degree C Shelf Life: 1 year from date of receipt
OMIM	AF082516 mRNA
3D Structure	ModBase 3D Structure for Q9Y2I1
Immunogen	Between 1100 and 1150
Conjugation	Unconjugated
Product Categories/Family for anti-NISCH antibody	Primary Antibodies
Applications Tested/Suitable for anti-NISCH antibody	Immunoprecipitation (IP)
Application Notes for anti-NISCH antibody	IP: 6ug/mg lysate
Related Product Information for anti-NISCH antibody	Nischarin (NISCH) is a nonadrenergic imidazoline-1 receptor protein that localizes to the cytosol and anchors to the inner layer of the plasma membrane. The orthologous mouse protein has been shown to influence cytoskeletal organization and cell migration by binding to alpha-5-beta-1 integrin. In humans, this protein has been shown to bind to the adapter insulin receptor substrate 4 (IRS4) to mediate translocation of alpha-5 integrin from the cell membrane to endosomes. Expression of NISCH was reduced in human breast cancers while its overexpression reduced tumor growth and metastasis; possibly by limiting the expression of alpha-5 integrin. In human cardiac tissue, this gene was found to affect cell growth and death while in neural tissue it affected neuronal growth and differentiation[taken from NCBI Entrez Gene (Gene ID: 11188)].
Other Notes	Small volumes of anti-NISCH antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for NISCH purchase	MBS3905580 is an antibody targeting NISCH. Also known as Rabbit anti-NISCH Antibody, Affinity Purified. Reactive in Human. Host: Rabbit.



Immunoprecipitation (IP) of anti-NISCH antibody
Detection of human NISCH by western blot of immunoprecipitates. Samples: Whole cell lysate (0.5 or 1.0 mg per IP reaction; 20% of IP loaded) from Jurkat cells prepared using NETN lysis buffer. Antibodies: Affinity purified rabbit anti-NISCH antibody MBS3905580 (lot MBS3905580-1) used for IP at 6 ug per reaction. NISCH was also immunoprecipitated by rabbit anti-NISCH antibody BL21611. For blotting immunoprecipitated NISCH, MBS3905580 was used at 0.4 ug/ml. Detection: Chemiluminescence with an exposure time of 30 seconds.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for NISCH. It may not necessarily be applicable to this product.

NCBI GeneID	11188
NCBI Accession #	NP_009115.3
UniProt Primary Accession #	Q9Y2I1
UniProt Protein Name	Nischarin
UniProt Synonym Protein Names	Imidazoline receptor 1; I-1; IR1; Imidazoline receptor antisera-selected protein; hIRAS; Imidazoline-1 receptor; I1R; Imidazoline-1 receptor candidate protein; I-1 receptor candidate protein; I1R candidate protein
Protein Family	Nischarin
UniProt Gene Name	NISCH
UniProt Synonym Gene Names	IRAS; KIAA0975; I-1; IR1; hIRAS; I1R; I-1 receptor candidate protein; I1R candidate protein

UniProt Comments for NISCH	NISCH: Acts either as the functional imidazoline-1 receptor (I1R) candidate or as a membrane-associated mediator of the I1R signaling. Binds numerous imidazoline ligands that induces initiation of cell-signaling cascades triggering to cell survival, growth and migration. Its activation by the agonist rilmenidine induces an increase in phosphorylation of mitogen-activated protein kinases MAPK1 and MAPK3 in rostral ventrolateral medulla (RVLM) neurons that exhibited rilmenidine-evoked hypotension. Blocking its activation with efaroxan abolished rilmenidine-induced mitogen-activated protein kinase phosphorylation in RVLM neurons. Acts as a modulator of Rac-regulated signal transduction pathways. Suppresses Rac1-stimulated cell migration by interacting with PAK1 and inhibiting its kinase activity. Also blocks Pak-independent Rac signaling by interacting with RAC1 and inhibiting Rac1-stimulated NF-kB response element and cyclin D1 promoter activation. Inhibits also LIMK1 kinase activity by reducing LIMK1 'Tyr-508' phosphorylation. Inhibits Rac-induced cell migration and invasion in breast and colon epithelial cells. Inhibits lamellipodia formation, when overexpressed. Plays a role in protection against apoptosis. Involved in association with IRS4 in the enhancement of insulin activation of MAPK1 and MAPK3. When overexpressed, induces a redistribution of cell surface ITGA5 integrin to intracellular endosomal structures. 4 isoforms of the human protein are produced by alternative splicing. Protein type: Motility/polarity/chemotaxis; Receptor, GPCR Chromosomal Location of Human Ortholog: 3p21.1 Cellular Component: cytosol; early endosome; membrane; plasma membrane; recycling endosome Molecular Function: identical protein binding; integrin binding; phosphatidylinositol binding; protein binding Biological Process: actin cytoskeleton organization; apoptosis; glucose metabolic process; negative regulation of cell migration; norepinephrine secretion; Rac protein signal transduction; regulation of blood pressure; regulation of synaptic transmission, GABAergic
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