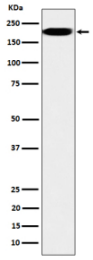
IQGAP2 Antibody / IQ motif containing GTPase activating protein 2 [clone 30I08] (FY12561)

Catalog No.	Formulation	Size
FY12561	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30I08
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q13576
Applications	Western Blot : 1:500-1:2000 Immunohistochemistry : 1:50-1:200
Limitations	This IQGAP2 antibody is available for research use only.



Western blot analysis of IQGAP2 expression in HepG2 cell lysate using IQGAP2 antibody. Predicted molecular weight ~181 kDa.

Description

IQGAP2 antibody detects IQ motif containing GTPase activating protein 2, encoded by the IQGAP2 gene. IQGAP2 belongs to a family of scaffolding proteins that integrate cytoskeletal dynamics, cell adhesion, and intracellular signaling. Unlike classical GTPase activating proteins, IQGAPs stabilize the active GTP bound form of small GTPases such as

Rac1 and Cdc42. Through its IQ motifs, calponin homology domain, and RasGAP related domain, IQGAP2 coordinates actin reorganization, cell polarity, and signaling cascades.

IQGAP2 antibody is widely used in cancer biology, hepatology, and cytoskeletal research. IQGAP2 is highly expressed in liver, stomach, and testis. It regulates actin dynamics and adherens junctions by interacting with beta catenin, E cadherin, and F actin. Altered expression of IQGAP2 has been linked to hepatocellular carcinoma and gastric cancer, where loss of IQGAP2 promotes tumorigenesis. By detecting IQGAP2, researchers can study its tumor suppressor functions and its role in epithelial tissue integrity.

Western blot assays with IQGAP2 antibody detect protein bands in hepatic and epithelial tissues. Immunohistochemistry highlights expression in liver lobules and gastric mucosa, while immunofluorescence reveals cytoplasmic localization at cell junctions and actin filaments. ELISA enables quantification of IQGAP2 expression across experimental samples.

IQGAP2 participates in multiple signaling pathways, including Wnt, MAPK, and PI3K AKT. Its ability to bind both actin and signaling proteins positions it as a key scaffold at the plasma membrane. In cancer, IQGAP2 expression is frequently downregulated, contrasting with IQGAP1, which is often upregulated. This differential regulation underscores the unique tumor suppressive properties of IQGAP2. By applying IQGAP2 antibody, scientists can investigate how cytoskeletal regulation intersects with cancer biology and metabolic homeostasis.

IQGAP2 also plays roles in immune signaling and reproduction. In immune cells, it modulates cytoskeletal dynamics during migration and activation. In testis, IQGAP2 expression suggests involvement in spermatogenesis and germ cell polarity. These diverse roles make IQGAP2 antibody a valuable reagent for broad research areas beyond oncology.

IQGAP2 antibody from NSJ Bioreagents provides dependable specificity for studying cytoskeletal scaffolding and tumor suppression. Its strong performance across techniques ensures accurate detection of IQGAP2 in multiple research contexts.

Application Notes

Optimal dilution of the IQGAP2 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human IQGAP2 was used as the immunogen for the IQGAP2 antibody.

Storage

Store the IQGAP2 antibody at -20oC.