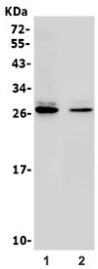
14-3-3 Gamma Antibody / 14-3-3 Protein Gamma Antibody (RQ5931)

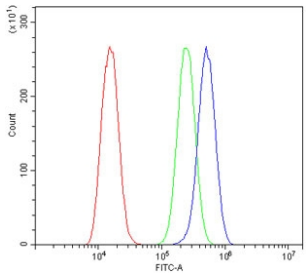
Catalog No.	Formulation	Size
RQ5931	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

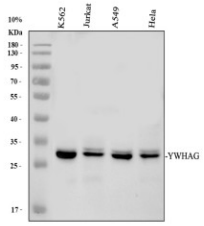
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P61981
Applications	Western blot: 0.5-1ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This 14-3-3 Gamma Antibody / 14-3-3 Protein Gamma Antibody is available for research use only.



14-3-3 Gamma Antibody Mouse and Rat Brain WB. Western blot analysis of rat and mouse brain tissue lysates using 14-3-3 Gamma Antibody. Lane 1: rat brain; Lane 2: mouse brain. A specific band is detected at approximately 28 kDa, consistent with the predicted molecular weight of 14-3-3 gamma. This 14-3-3 Gamma Antibody, also called a 14-3-3 Protein Gamma Antibody, detects the protein in rat and mouse brain and supports studies of phosphorylation-dependent signaling and neuronal regulatory mechanisms.



14-3-3 Gamma Antibody A549 Cell FACS. Flow cytometry analysis of human A549 cells using 14-3-3 Gamma Antibody at 1 ug/million cells. Cells were blocked with goat serum prior to staining. The histogram shows 14-3-3 gamma staining (blue), isotype control (green) and unstained cells (red). A positive fluorescence shift is observed with 14-3-3 gamma staining relative to the isotype control. This 14-3-3 Gamma Antibody, also called a 14-3-3 Protein Gamma Antibody, detects 14-3-3 gamma in human A549 cells and supports studies of phosphorylation-dependent signaling and intracellular regulatory mechanisms.



14-3-3 Gamma Antibody Human Cancer and Immune Cell WB. Western blot analysis of 14-3-3 gamma in human K562, Jurkat, A549 and HeLa cell lysates using 14-3-3 Gamma Antibody. Lane 1: K562; Lane 2: Jurkat; Lane 3: A549; Lane 4: HeLa. A specific band is detected at approximately 28 kDa, consistent with the expected molecular weight of 14-3-3 gamma/YWHAG. This 14-3-3 Gamma Antibody, also called a 14-3-3 Protein Gamma Antibody, detects 14-3-3 gamma across multiple human cell lines and supports studies of phosphorylation-dependent signaling and intracellular regulatory mechanisms.

Description

14-3-3 Gamma Antibody / 14-3-3 Protein Gamma Antibody recognizes the gamma isoform of the 14-3-3 family, encoded by the YWHAG gene. 14-3-3 proteins are highly conserved regulatory molecules that bind numerous signaling proteins, frequently through phosphorylation-dependent interactions. Through these associations, 14-3-3 gamma can influence protein localization, stability, conformation and interactions with other cellular components. Its ability to associate with proteins from multiple signaling pathways makes 14-3-3 gamma relevant to studies of signal transduction, cell survival, proliferation and responses to changing cellular conditions.

The mammalian 14-3-3 family consists of several closely related isoforms that function as dimers and interact with a broad range of intracellular proteins. Many 14-3-3 interactions involve recognition of phosphoserine- or phosphothreonine-containing motifs generated by protein kinase signaling. Binding can alter the activity or subcellular distribution of the interacting protein, protect phosphorylation sites from dephosphorylation or regulate assembly of multiprotein complexes. A 14-3-3 Gamma Antibody can therefore support investigation of a regulatory protein positioned downstream of numerous phosphorylation-dependent signaling events.

14-3-3 gamma participates in pathways controlling cell proliferation, survival, apoptosis and cell-cycle progression. Members of the 14-3-3 family interact with signaling proteins associated with kinase cascades and apoptotic regulation, allowing phosphorylation events to be translated into changes in cellular behavior. 14-3-3 proteins can also regulate trafficking between cellular compartments by retaining interacting proteins in particular locations or altering their accessibility to other binding partners. These functions illustrate how 14-3-3 gamma acts as a molecular adaptor within broader signaling networks rather than functioning as a conventional enzyme or receptor.

YWHAG is expressed in numerous tissues, and 14-3-3 gamma has been investigated in neuronal biology, development, cancer and other areas involving altered cellular signaling. Changes in 14-3-3 protein expression or interactions can influence the balance between proliferative and apoptotic signaling as well as the localization and activity of regulatory proteins. The gamma isoform has also been studied in the nervous system, where tightly controlled phosphorylation-dependent protein interactions contribute to neuronal development and function. Because individual 14-3-3 isoforms share substantial sequence and functional similarity, isoform-specific experimental analysis can be important when examining YWHAG biology.

The broad interaction network of 14-3-3 gamma places it at an important intersection of phosphorylation-dependent signaling and cellular regulation. Its capacity to bind signaling proteins and influence their localization, stability and molecular interactions provides a mechanism through which kinase activity can produce downstream cellular responses. This biology makes YWHAG particularly relevant to the broader study of intracellular signal transduction. NSJ

Bioreagents supplies antibodies to 14-3-3 gamma and other proteins involved in cellular signaling networks. A 14-3-3 Gamma Antibody can support research on 14-3-3 Protein Gamma, phosphoprotein interactions, kinase-dependent signaling, cell survival and intracellular regulatory mechanisms.

For related targets involved in phosphorylation-dependent pathways, intracellular regulatory networks and cellular responses, explore our Signal Transduction Antibodies page.

Application Notes

Optimal dilution of the 14-3-3 Gamma Antibody / 14-3-3 Protein Gamma Antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids Y107-A138) was used as the immunogen for the 14-3-3 gamma antibody.

Storage

After reconstitution, the 14-3-3 gamma antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

14-3-3 Gamma antibody, 14-3-3 Protein Gamma antibody, YWHAG antibody, Tyrosine 3-Monooxygenase/Tryptophan 5-Monooxygenase Activation Protein Gamma antibody

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