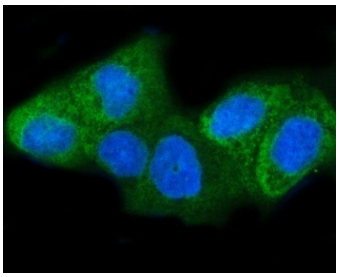
Insulin-induced gene 1 Antibody / INSIG1 (RQ8469)

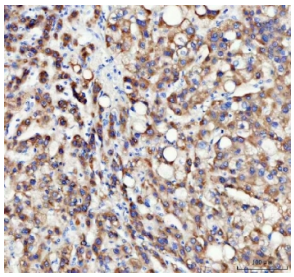
Catalog No.	Formulation	Size
RQ8469	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

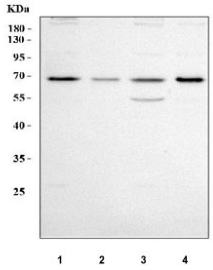
Availability	1-3 days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O15503
Localization	Cytoplasm
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This Insulin-induced gene 1 antibody is available for research use only.



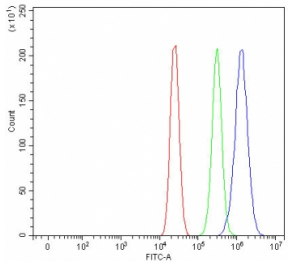
Immunofluorescent staining of FFPE human HeLa cells with Insulin-induced gene 1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



IHC staining of FFPE human liver cancer tissue with Insulin-induced gene 1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) HepG2, 2) A549, 3) MCF7 and 4) HUH7 cell lysate with Insulin-induced gene 1 antibody. Predicted molecular weight ~30 kDa with a 66-70 kDa precursor.



Flow cytometry testing of fixed and permeabilized human MCF7 cells with Insulin-induced gene 1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Insulin-induced gene 1 antibody.

Description

Insulin induced gene 1, also known as INSIG1, is a protein which in humans is encoded by the INSIG1 gene. This gene encodes an endoplasmic reticulum membrane protein that regulates cholesterol metabolism, lipogenesis, and glucose homeostasis. The encoded protein has six transmembrane helices which contain an effector protein binding site. It binds the sterol-sensing domains of sterol regulatory element-binding protein (SREBP) cleavage-activating protein (SCAP) and 3-hydroxy-3-methylglutaryl-coenzyme A reductase (HMG-CoA reductase), and is essential for the sterol-mediated trafficking of these two proteins. It promotes the endoplasmic reticulum retention of SCAP and the ubiquitin-mediated degradation of HMG-CoA reductase. Alternative splicing results in multiple transcript variants.

Application Notes

Optimal dilution of the Insulin-induced gene 1 antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (amino acids M1-R87) was used as the immunogen for the Insulin-induced gene 1 antibody.

Storage

After reconstitution, the Insulin-induced gene 1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Copyright © NSJ Bioreagents. All rights reserved.