

# INSIG1 antibody - middle region

Rabbit Polyclonal Antibody

Catalog # AI11691

## Product Information

Application	WB
Primary Accession	<a href="#">Q9Y5U4</a>
Other Accession	<a href="#">NM_016133</a> , <a href="#">NP_057217</a>
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Goat, Dog, Horse, Bovine, Sheep
Predicted	Human, Rabbit, Pig, Chicken, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24778

## Additional Information

Gene ID	51141
Alias Symbol	MGC26273, INSIG1
Other Names	Insulin-induced gene 2 protein, INSIG-2, INSIG2
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-INSIG1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	INSIG1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

Name	INSIG2 {ECO:0000303   PubMed:12242332, ECO:0000312   HGNC:HGNC:20452}
Function	Oxysterol-binding protein that mediates feedback control of cholesterol synthesis by controlling both endoplasmic reticulum to Golgi transport of SCAP and degradation of HMGCR (PubMed: <a href="#">12242332</a> , PubMed: <a href="#">16606821</a> , PubMed: <a href="#">32322062</a> ). Acts as a negative regulator of cholesterol biosynthesis by mediating the retention of the SCAP-SREBP complex in the endoplasmic reticulum, thereby blocking the processing of sterol regulatory element-binding proteins (SREBPs) SREBF1/SREBP1 and SREBF2/SREBP2 (PubMed: <a href="#">32322062</a> ). Binds oxysterol, including 22- hydroxycholesterol, 24-hydroxycholesterol, 25-hydroxycholesterol and 27-hydroxycholesterol, regulating interaction with SCAP and retention of the SCAP-SREBP complex in

the endoplasmic reticulum (PubMed:[17428920](#), PubMed:[26160948](#), PubMed:[32322062](#)). In presence of oxysterol, interacts with SCAP, retaining the SCAP-SREBP complex in the endoplasmic reticulum, thereby preventing SCAP from escorting SREBF1/SREBP1 and SREBF2/SREBP2 to the Golgi (PubMed:[32322062](#)). Sterol deprivation or phosphorylation by PCK1 reduce oxysterol-binding, disrupting the interaction between INSIG2 and SCAP, thereby promoting Golgi transport of the SCAP-SREBP complex, followed by processing and nuclear translocation of SREBF1/SREBP1 and SREBF2/SREBP2 (PubMed:[32322062](#)). Also regulates cholesterol synthesis by regulating degradation of HMGCR: initiates the sterol-mediated ubiquitin-mediated endoplasmic reticulum-associated degradation (ERAD) of HMGCR via recruitment of the reductase to the ubiquitin ligase RNF139 (PubMed:[16606821](#), PubMed:[22143767](#)).

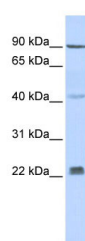
## Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein

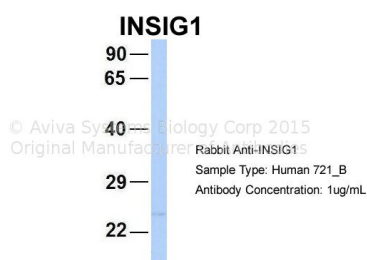
## References

Li,C.G., (2008) Int. J. Cancer 123 (2), 273-282 Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.

## Images



WB Suggested Anti-INSIG1 Antibody Titration: 0.2-1 µg/ml  
ELISA Titer: 1:1562500  
Positive Control: Human Muscle



Host: Rabbit  
Target Name: WT1  
Sample Tissue: 721\_B  
Antibody Dilution: 1.0µg/ml  
INSIG2 is supported by BioGPS gene expression data to be expressed in 721\_B

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.