

# Synip Antibody



**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

**For Research Use Only. Not for Use in Diagnostic Procedures.**

Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
Endogenous	62	Rabbit	#Q6ZWJ1	252983

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

## Specificity/Sensitivity

Synip Antibody detects endogenous levels of total Synip protein.

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence of human Synip. Antibodies are purified by protein A and peptide affinity chromatography.

## Background

Insulin binds to and activates its receptor and initiates a signaling cascade that eventually induces the translocation of the Glut4 glucose transporter from its intracellular locations to the plasma membrane. Initiating this pathway facilitates glucose uptake in fat and skeletal muscle cells (1). Synip and Syntaxin 4 are two proteins thought to be involved in the recruitment of Glut4-containing vesicles to plasma membrane (2,3). Synip associates with Syntaxin 4 when insulin is absent. Insulin signaling triggers the dissociation of the two proteins and allows Syntaxin 4 to complex with VAMP2, which is essential for Glut4 translocation to plasma membrane (2-4). Overexpression of a dominant-negative form of Synip prevents Glut4 from translocating to plasma membrane in response to insulin stimulation (3). Synip together with Syntaxin 4, therefore, regulates Glut 4 transport to plasma membrane.

## Background References

1. Watson, R.T. and Pessin, J.E. (2006) *Trends Biochem. Sci.* 31, 215-222.
2. Min, J. et al. (1999) *Mol. Cell* 3, 751-760.
3. Yamada, E. et al. (2005) *J. Cell Biol.* 168, 921-928.
4. Foster, L.J. and Klip, A. (2000) *Am. J. Physiol. Cell Physiol.* 279, C877-C890.

## Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

## Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit [cellsignal.com/trademarks](http://cellsignal.com/trademarks) for more information.

## Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.

**Orders: 877-616-CELL (2355) • orders@cellsignal.com • Support: 877-678-TECH (8324) • info@cellsignal.com • Web: cellsignal.com**  
For Research Use Only. Not for Use in Diagnostic Procedures.