



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



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Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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- Trockeneiszuschlag
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- Expressversand

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# PRODUCT INFORMATION



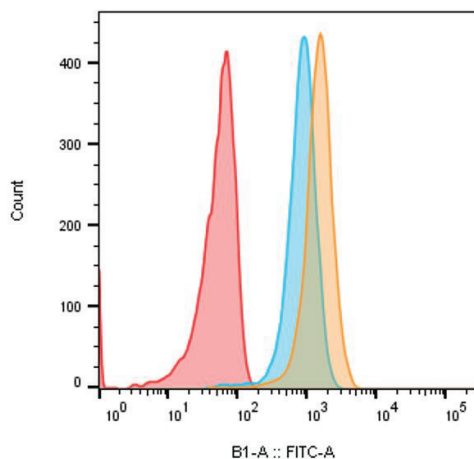
## Sphingosine Kinase 1 Polyclonal FITC Antibody

Item No. 10012201

### Overview and Properties

<b>Contents:</b>	This vial contains 100 µg of peptide affinity-purified polyclonal antibody conjugated to fluorescein.
<b>Synonym:</b>	SK1, SPK1, SPHK1
<b>Immunogen:</b>	Synthetic peptide from an internal region of human SPHK1
<b>Species Reactivity:</b>	(+) Human, mouse, and pig
<b>Uniprot No.:</b>	Q9NYA1
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥1 year
<b>Storage Buffer:</b>	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
<b>Host:</b>	Rabbit
<b>Applications:</b>	Flow cytometry (FC) and Western blot (WB); the recommended starting dilution is 1:40 and 1:50, respectively. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Image



**Red:** Secondary control  
**Blue:** SPHK1 (5 µg)  
**Orange:** SPHK1 (10 µg)

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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# PRODUCT INFORMATION



## Description

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The primary use of this antibody conjugate is for the detection of SPHK1 in intact cells by direct immunolabeling methods such as flow cytometry or immunofluorescence microscopy. SPHK1 is one of the enzymes involved in sphingolipid metabolism. SPHK1 catalyzes the phosphorylation of sphingosine to sphingosine-1-phosphate. This reaction plays an important role in determining cell proliferation versus cell death.<sup>1,2</sup> SPHK1 is found in a wide variety of tissues and cell types including kidney, liver, spleen, heart, platelets, and human tumors.<sup>3</sup> On a cellular level, it is found in the cytosolic and membrane fractions.<sup>4</sup> Based on the amino acid sequence, this protein has a molecular weight of approximately 43 kDa. Some reported post translational modifications may explain the shift in band migration to 50 kDa.<sup>5</sup> NOTE: Multiple isoforms of SPHK1 are known and one is 470 amino acids. This likely explains the 50 kDa band observed.

## References

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2. Merrill, A.H., Jr., Sullards, M.C., Wang, E., *et al.* Sphingolipid metabolism: Roles in signal transduction and disruption by fumonisins. *Environ. Health Perspect.* **109**(suppl. 2), 283-289 (2001).
3. Kim, J.W., Kim, Y.W., Inagaki, Y., *et al.* Synthesis and evaluation of sphingoid analogs as inhibitors of sphingosine kinase. *Bioorg. Med. Chem.* **13**, 3475-3485 (2005).
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5. Pitson, S.M., D'Andrea, R.J., Vandeleur, L., *et al.* Human sphingosine kinase: Purification, molecular cloning and characterization of the native and recombinant enzymes. *Biochem. J.* **350**, 429-441 (2000).

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