# abcam

## Product datasheet

# Anti-STIL/SIL antibody ab89314

**26 References** 3 Images

Overview

Product name Anti-STIL/SIL antibody

**Description** Rabbit polyclonal to STIL/SIL

Host species Rabbit

Tested applications

Suitable for: ICC/IF, WB, IP

Species reactivity

Reacts with: Mouse, Human

Predicted to work with: Rat, Rabbit, Horse, Guinea pig, Cow, Pig, Chimpanzee, Gorilla,

Opossum, Orangutan, Elephant

Immunogen Synthetic peptide corresponding to Human STIL/SIL aa 1237-1287.

Database link: NP\_003026.2

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 6.8

Preservative: 0.09% Sodium azide

Constituents: 0.1% BSA, Tris buffered saline

**Purity** Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

**Applications** 

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### The Abpromise guarantee

Our Abpromise guarantee covers the use of ab89314 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes	
ICC/IF		Use at an assay dependent concentration.	
WB		1/2000 - 1/10000. Predicted molecular weight: 143 kDa.	
IP		Use at 2-5 µg/mg of lysate.	

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#### **Function**

Immediate-early gene. Plays an important role in embryonic development as well as in cellular growth and proliferation; its long-term silencing affects cell survival and cell cycle distribution as well as decreases CDK1 activity correlated with reduced phosphorylation of CDK1. Play a role as a positive regulator of the sonic hedgehog pathway, acting downstream of PTCH1.

#### **Tissue specificity**

Expressed in all hematopoietic tissues and cell lines. Highly expressed in a variety of tumors characterized by increased mitotic activity with highest expression in lung cancer.

#### Involvement in disease

Note=A chromosomal aberration involving STIL may be a cause of some T-cell acute lymphoblastic leukemias (T-ALL). A deletion at 1p32 between STIL and TAL1 genes leads to STIL/TAL1 fusion mRNA with STIL exon 1 slicing to TAL1 exon 3. As both STIL exon 1 and TAL1 exon 3 are 5'-untranslated exons, STIL/TAL1 fusion mRNA predicts a full length TAL1 protein under the control of the STIL promoter, leading to inappropriate TAL1 expression. In childhood T-cell malignancies (T-ALL), a type of defect such as STIL/TAL1 fusion is associated with a good prognosis. In cultured lymphocytes from healthy adults, STIL/TAL1 fusion mRNA may be detected after 7 days of culture.

Defects in STIL are the cause of microcephaly primary type 7 (MCPH7) [MIM:612703]. Microcephaly is defined as a head circumference more than 3 standard deviations below the agerelated mean. Brain weight is markedly reduced and the cerebral cortex is disproportionately small. Despite this marked reduction in size, the gyral pattern is relatively well preserved, with no major abnormality in cortical architecture. Primary microcephaly is further defined by the absence of other syndromic features or significant neurological deficits.

# Post-translational modifications

Phosphorylated following the activation of the mitotic checkpoint.

#### **Cellular localization**

Cytoplasm > cytosol.

# **Images**



Western blot - Anti-STIL/SIL antibody (ab89314)

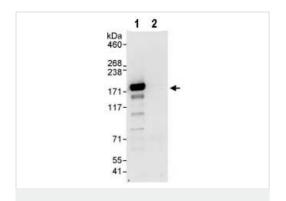


Lane 1 : HeLa whole cell lysate at 50  $\mu$ g Lane 2 : HeLa whole cell lysate at 15  $\mu$ g Lane 3 : HeLa whole cell lysate at 5  $\mu$ g

Developed using the ECL technique.

**Predicted band size:** 143 kDa **Observed band size:** 175 kDa

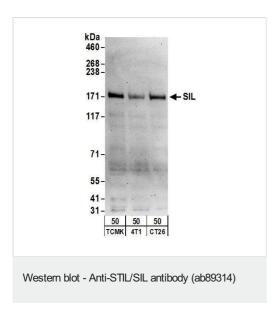




Immunoprecipitation - Anti-STIL/SIL antibody (ab89314)

Detection of STIL/SIL in Immunoprecipitates of Hela whole cell lysates (1 mg for IP, 20% of IP loaded) using ab89314 at 3  $\mu$ g/mg lysate for IP (Lane 1) and at 1  $\mu$ g/ml for subsequent Western blot detection. Lane 2 represents control lgG IP.

Detection: Chemiluminescence with exposure time of 30 seconds.



All lanes: Anti-STIL/SIL antibody (ab89314) at 0.1 µg/ml

Lane 1 : TCMK-1 cell lysate

Lane 2: 4T1 cell lysate

Lane 3: CT26.WT cell lysate

Lysates/proteins at 50 µg per lane.

Predicted band size: 143 kDa

Exposure time: 3 minutes

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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