

Anti-CISH Antibody

Catalog # ABO11093

Specification

Anti-CISH Antibody - Product Information

Application Primary Accession Host Reactivity Clonality Format **Description** Babbit IgG polyclona WB, IHC-P, ICC <u>O9NSE2</u> Rabbit Human, Mouse, Rat Polyclonal Lyophilized

Rabbit IgG polyclonal antibody for Cytokine-inducible SH2-containing protein(CISH) detection. Tested with WB, IHC-P, ICC in Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CISH Antibody - Additional Information

Gene ID 1154

Other Names Cytokine-inducible SH2-containing protein, CIS, CIS-1, Protein G18, Suppressor of cytokine signaling, SOCS, CISH, G18

Calculated MW 28663 MW KDa

Application Details Immunocytochemistry, 0.5-1 μg/ml, Human, Mouse, Rat
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 μg/ml, Human, Rat, Mouse

Tissue Specificity Expressed in various epithelial tissues. Abundantly expressed in liver and kidney, and to a lesser extent in lung. The tissue distribution of isoforms 1 and 1B is distinct.

Protein Name Cytokine-inducible SH2-containing protein(CIS)

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human CISH(241-258aa LPLPRRMADYLRQYPFQL), identical to the related rat and mouse sequences.

Purification



Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Contains 1 SH2 domain.

Anti-CISH Antibody - Protein Information

Name CISH

Synonyms G18

Function

SOCS family proteins form part of a classical negative feedback system that regulates cytokine signal transduction. CIS is involved in the negative regulation of cytokines that signal through the JAK-STAT5 pathway such as erythropoietin, prolactin and interleukin 3 (IL3) receptor. Inhibits STAT5 trans-activation by suppressing its tyrosine phosphorylation. May be a substrate-recognition component of a SCF-like ECS (Elongin BC-CUL2/5-SOCS-box protein) E3 ubiquitin-protein ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins (By similarity).

Tissue Location

Expressed in various epithelial tissues. Abundantly expressed in liver and kidney, and to a lesser extent in lung. The tissue distribution of isoforms 1 and 1B is distinct

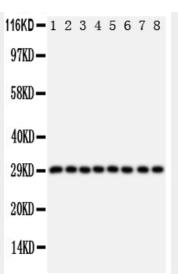
Anti-CISH Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

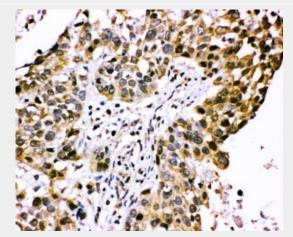
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-CISH Antibody - Images

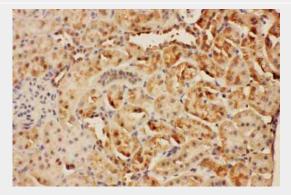




Anti-CISH antibody, ABO11093, Western blottingAll lanes: Anti CISH (ABO11093) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: Rat Kidney Tissue Lysate at 50ugLane 3: Human Placenta Tissue Lysate at 50ugLane 4: A431 Whole Cell Lysate at 40ugLane 5: SMMC Whole Cell Lysate at 40ugLane 6: HELA Whole Cell Lysate at 40ugLane 7: COLO320 Whole Cell Lysate at 40ugLane 8: MM231 Whole Cell Lysate at 40ugPredicted bind size: 29KDObserved bind size: 29KD



Anti-CISH antibody, ABO11093, IHC(P)IHC(P): Human Lung Cancer Tissue



Anti-CISH antibody, ABO11093, IHC(P)IHC(P): Rat Kidney Tissue Anti-CISH Antibody - Background

CISH(cytokine inducible SH2-containing protein), also called CIS, CIS-1, G18, SOCS, is an important negative regulator for inflammatory signaling and belongs to the suppressors of cytokine



signaling(SOCS) family. CIS family members are known to be cytokine-inducible negative regulators of cytokine signaling. CISH controls interleukin-2 signaling, and variations of CISH with certain SNPs are associated with susceptibility to bacteremia, tuberculosis and malaria. The human CISH gene is mapped to chromosome 3p21.3 by FISH. The mouse gene is tightly linked to the Gnai2 gene on chromosome 9, a region syntenic to human chromosome 3p21. CIS expression was upregulated by lipopolysaccharide(LPS) or Cryptosporidium parvum exposure, and this upregulation involved downregulation of MIR98 and LET7, which relieved MIR98- and LET7-mediated translational repression of CIS. Gain- and loss-of-function studies showed that CIS accelerated degradation of IKBA and enhanced NFKB activation in cholangiocytes in response to LPS stimulation or C parvum exposure.