

# CYS1 (S-13): sc-138913

## BACKGROUND

CYS1 (cystin-1), also known as cilia-associated protein or ck, is a 145 amino acid protein localized to cytoplasm and cilium. CYS1 is expressed at highest levels in liver and kidney, with lower levels found in brain, lung and heart. Defects in the gene that encodes CYS1 are a cause of polycystic kidney disease. The gene that encodes CYS1 maps to human chromosome 2. As the second largest human chromosome, chromosome 2 makes up approximately 8% of the human genome and contains 237 million bases encoding over 1,400 genes. A number of genetic diseases are linked to genes on chromosome 2, including Harlequin ichthyosis, sitosterolemia and Alstrom syndrome.

## REFERENCES

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- Thomas, A.C., et al. 2006. ABCA12 is the major harlequin ichthyosis gene. *J. Invest. Dermatol.* 126: 2408-2413.
- Akiyama, M., et al. 2007. Compound heterozygous ABCA12 mutations including a novel nonsense mutation underlie harlequin ichthyosis. *Dermatology* 215: 155-159.
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## CHROMOSOMAL LOCATION

Genetic locus: CYS1 (human) mapping to 2p25.1.

## SOURCE

CYS1 (S-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CYS1 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138913 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

CYS1 (S-13) is recommended for detection of CYS1 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CYS1 siRNA (h): sc-94561, CYS1 shRNA Plasmid (h): sc-94561-SH and CYS1 shRNA (h) Lentiviral Particles: sc-94561-V.

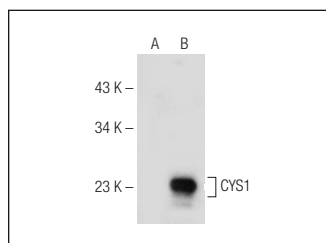
Molecular Weight of CYS1: 16 kDa.

Positive Controls: CYS1 (h): 293T Lysate: sc-372161.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



CYS1 (S-13): sc-138913. Western blot analysis of CYS1 expression in non-transfected: sc-117752 (A) and human CYS1 transfected: sc-372161 (B) 293T whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.