

# Xin $\beta$ (D-18): sc-83128

## BACKGROUND

Xin $\beta$ , also known as CMYA3 (cardiomyopathy-associated protein 3) or XIRP2 (Xin Actin-binding repeat containing 2), is a 3,374 amino acid protein that co-localizes with Actin stress fibers at the cell junction and contains 28 Xin repeats. Interacting with F-Actin and  $\alpha$ -actinin-2, Xin $\beta$  functions to protect Actin filaments from depolymerization, thereby playing an important role in Actin organization and structural maintenance. Multiple isoforms of Xin $\beta$  exist due to alternative splicing events. The gene encoding Xin $\beta$  maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene, while the lipid metabolic disorder sitosterolemia is associated with defects in the ABCG5 and ABCG8 genes. Additionally, an extremely rare recessive genetic disorder, Alström syndrome, is caused by mutations in the ALMS1 gene, which maps to chromosome 2.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: XIRP2 (human) mapping to 2q24.3; Xirp2 (mouse) mapping to 2 C1.3.

## SOURCE

Xin $\beta$  (D-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Xin $\beta$  of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83128 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Xin $\beta$  (D-18) is recommended for detection of Xin $\beta$  of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Xin $\beta$  (D-18) is also recommended for detection of Xin $\beta$  in additional species, including bovine.

Suitable for use as control antibody for Xin $\beta$  siRNA (h): sc-72933, Xin $\beta$  siRNA (m): sc-72934, Xin $\beta$  shRNA Plasmid (h): sc-72933-SH, Xin $\beta$  shRNA Plasmid (m): sc-72934-SH, Xin $\beta$  shRNA (h) Lentiviral Particles: sc-72933-V and Xin $\beta$  shRNA (m) Lentiviral Particles: sc-72934-V.

Xin $\beta$  (D-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Xin $\beta$ : 382 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## 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.