

# DFNA5 (N-18): sc-79233

## BACKGROUND

DFNA5 (deafness, autosomal dominant 5), also known as ICERE-1, is a 496 amino acid protein that is expressed in cochlea tissue, as well as in placenta, brain, heart, liver, lung and pancreas as 2 alternatively spliced isoforms, designated short and long. Defects in the gene encoding DFNA5 are the cause of non-syndromic sensorineural deafness autosomal dominant type 5 (DFNA5), a form of sensorineural hearing loss that results from damage to one of various structures that receive sound information in the brain. The gene encoding DFNA5 maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

## CHROMOSOMAL LOCATION

Genetic locus: DFNA5 (human) mapping to 7p15.3; Dfna5h (mouse) mapping to 6 B2.3.

## SOURCE

DFNA5 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of DFNA5 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79233 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

DFNA5 (N-18) is recommended for detection of DFNA5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

DFNA5 (N-18) is also recommended for detection of DFNA5 in additional species, including equine.

Suitable for use as control antibody for DFNA5 siRNA (h): sc-77135, DFNA5 siRNA (m): sc-77136, DFNA5 shRNA Plasmid (h): sc-77135-SH, DFNA5 shRNA Plasmid (m): sc-77136-SH, DFNA5 shRNA (h) Lentiviral Particles: sc-77135-V and DFNA5 shRNA (m) Lentiviral Particles: sc-77136-V.

Molecular Weight of DFNA5 long: 55 kDa.

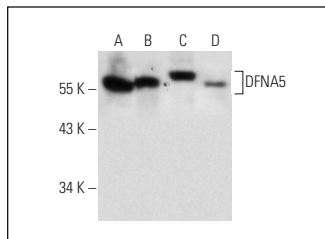
Molecular Weight of DFNA5 short: 11 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, mouse liver extract: sc-2256 or rat liver extract: sc-2395.

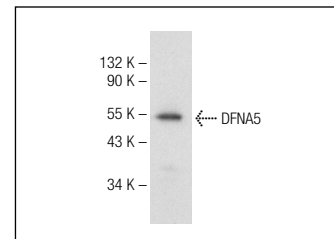
## RECOMMENDED SECONDARY REAGENTS

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™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 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™ Mounting Medium: sc-24941.

## DATA



DFNA5 (N-18): sc-79233. Western blot analysis of DFNA5 expression in Hep G2 whole cell lysate (A) and mouse liver (B), rat liver (C) and human kidney (D) tissue extracts.



DFNA5 (N-18): sc-79233. Western blot analysis of DFNA5 expression in HeLa whole cell lysate.

## 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.



Try **DFNA5 (G-9): sc-393162**, our highly recommended monoclonal alternative to DFNA5 (N-18).