## BACKGROUND

NSDHL (NAD(P) dependent steroid dehydrogenase-like), also known as H105E3, XAP104 or SDR31E1, is a 373 amino acid single-pass membrane protein expressed in brain, heart, liver, lung, kidney, skin and placenta. Belonging to the $3-\beta$-HSD family, NSDHL localizes to the endoplasmic reticulum and is involved in cholesterol biosynthesis. NSDHL is thought to be involved in the demethylation of sterol precursors in one of the later steps of cholesterol biosynthesis. Defects in the gene encoding NSDHL causes congenital hemidysplasia with ichthyosiform erythroderma and limb defects (CHILD), which is an X-linked dominant disorder of lipid metabolism with defective cholesterol biosynthesis that usually results in male lethality. CHILD is characterized by congenital hemidysplasia with ichthyosiform erythroderma and ipsilateral hypoplasia of limbs and other parts of the skeleton.

## CHROMOSOMAL LOCATION

Genetic locus: NSDHL (human) mapping to Xq28; Nsdhl (mouse) mapping to X A7.3.

## SOURCE

NSDHL (T-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NSDHL of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{gg} \lg$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.
Blocking peptide available for competition studies, sc-161969 P, (100 $\mu \mathrm{g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \% \mathrm{BSA}$ ).

## STORAGE

Store at $4^{\circ} \mathrm{C}$, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

NSDHL (T-17) is recommended for detection of NSDHL of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation $[1-2 \mu \mathrm{~g}$ per $100-500 \mu \mathrm{~g}$ 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).
NSDHL (T-17) is also recommended for detection of NSDHL in additional species, including equine, canine, bovine, porcine and avian.
Suitable for use as control antibody for NSDHL siRNA (h): sc-90849, NSDHL siRNA (m): sc-150073, NSDHL shRNA Plasmid (h): sc-90849-SH, NSDHL shRNA Plasmid (m): sc-150073-SH, NSDHL shRNA (h) Lentiviral Particles: sc-90849-V and NSDHL shRNA (m) Lentiviral Particles: sc-150073-V.
Molecular Weight of NSDHL: 42 kDa .
Positive Controls: NSDHL (m): 293T Lysate: sc-122135, F9 cell lysate: sc-2245 or A-431 whole cell lysate: sc-2201.

## 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 ${ }^{\text {™ }}$ Mounting Medium: sc-24941.

## DATA



NSDHL (T-17): sc-161969. Western blot analysis of NSDHL expression in $\mathrm{F9}(\mathbf{A})$ and $\mathrm{A}-431(\mathbf{B})$ whole cell lysates.


NSDHL (T-17): sc-161969. Western blot analysis of NSDHL expression in non-transfected: sc-117752 (A) and mouse NSDHL transfected: sc-122135 (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 or our catalog for detailed protocols and support products.


