# abcam

## Product datasheet

# Anti-NSDHL antibody [EPR14490] - BSA and Azide free ab251016



Recombinant

RabMAb

### 6 Images

#### Overview

Product name Anti-NSDHL antibody [EPR14490] - BSA and Azide free

**Description** Rabbit monoclonal [EPR14490] to NSDHL - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB, IHC-P, ICC/IF

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HEK293T, A431 and HeLa cell lysates; Human fetal brain tissue lysate. IHC-P: Human

endometrium adenocarcinoma and liver tissues. ICC/IF: U87-MG cells.

**General notes** ab251016 is the carrier-free version of <u>ab190353</u>.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes,

oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our <u>conjugation kits</u> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP,

biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the

need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

1

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR14490

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab251016 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 38 kDa (predicted molecular weight: 42 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.

#### **Target**

**Tissue specificity** Brain, heart, liver, lung, kidney, skin and placenta.

**Pathway** Steroid biosynthesis; zymosterol biosynthesis; zymosterol from lanosterol: step 4/6.

**Involvement in disease**Defects in NSDHL are the cause of congenital hemidysplasia with ichthyosiform erythroderma

and limb defects (CHILD) [MIM:308050]. CHILD is an X-linked dominant disorder of lipid metabolism with disturbed cholesterol biosynthesis, which typically results in male lethality. Clinically, it is characterized by congenital, unilateral, ichthyosisform erythroderma with striking lateralization, sharp midline demarcation, and ipsilateral limb defects and hypoplasia of the body.

Limbs defects range from hypoplasia of digits or ribs to complete amelia, often including

scoliosis.

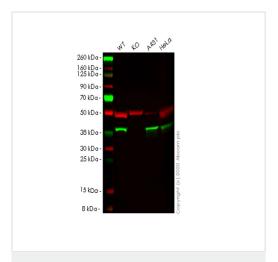
Defects in NSDHL are the cause of CK syndrome (CKS) [MIM:300831]. CKS is a disorder characterized by mild to severe cognitive impairment, seizures, microcephaly, cerebral cortical

malformations, dysmorphic facial features, and thin body habitus.

**Sequence similarities**Belongs to the 3-beta-HSD family.

**Cellular localization** Membrane.

# Images



Western blot - Anti-NSDHL antibody [EPR14490] - BSA and Azide free (ab251016)

**All lanes :** Anti-NSDHL antibody [EPR14490] (<u>ab190353</u>) at 1/1000 dilution

Lane 1: Wild-type HEK293T cell lysate

Lane 2: NSDHL knockout HEK293T cell lysate

Lane 3 : A431 cell lysate

Lane 4 : HeLa cell lysate

Lysates/proteins at 20 µg per lane.

#### **Secondary**

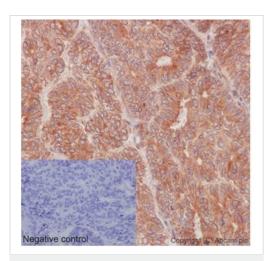
**All lanes :** Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

Predicted band size: 42 kDa
Observed band size: 38 kDa

This data was developed using <u>ab190353</u>, the same antibody clone in a different buffer formulation.

**Lanes 1-4:** Merged signal (red and green). Green - <u>ab190353</u> observed at 38 kDa. Red - loading control <u>ab7291</u> observed at 50 kDa.

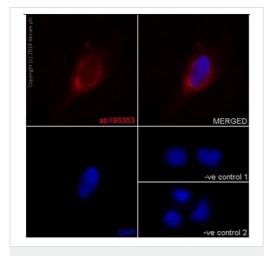
<u>ab190353</u> Anti-NSDHL antibody [EPR14490] was shown to specifically react with NSDHL in wild-type HEK293T cells. Loss of signal was observed when knockout cell line <u>ab266682</u> (knockout cell lysate <u>ab258082</u>) was used. Wild-type and NSDHL knockout samples were subjected to SDS-PAGE. <u>ab190353</u> and Anti-alpha Tubulin antibody [DM1A] - Loading Control (<u>ab7291</u>) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NSDHL antibody

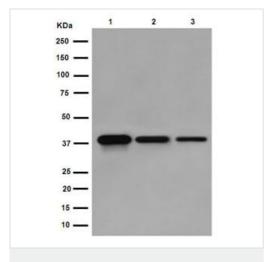
[EPR14490] - BSA and Azide free (ab251016)

This data was developed using <u>ab190353</u>, the same antibody clone in a different buffer formulation.Immunohistochemical analysis of paraffin-embedded Human adenocarcinoma of endometrium tissue labeling NSDHL with <u>ab190353</u> at 1/100 dilution. Secondary antibody HRP Polymer for Rabbit IgG prediluted. Counter stain Hematoxylin. Negative control also shown. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-NSDHL antibody [EPR14490] - BSA and Azide free (ab251016)

This data was developed using <u>ab190353</u>, the same antibody clone in a different buffer formulation.lmmunofluorescence analysis of U87-MG cells, labeling NSDHL (red) with <u>ab190353</u> at 1/50 dilution. Alexa Fluor®555-conjugated goat anti-rabbit lgG was used as a secondary antibody at 1/200 dilution. Nuclei were counterstained with DAPI (blue).



Western blot - Anti-NSDHL antibody [EPR14490] - BSA and Azide free (ab251016)

**All lanes :** Anti-NSDHL antibody [EPR14490] (**ab190353**) at 1/10000 dilution

Lane 1 : A431 cell lysate
Lane 2 : HeLa cell lysate

Lane 3: Human fetal brain tissue lysate

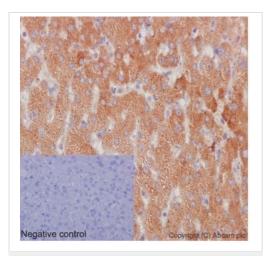
Lysates/proteins at 20 µg per lane.

#### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 42 kDa Observed band size: 38 kDa

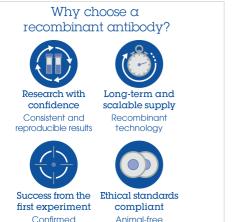
This data was developed using <u>ab190353</u>, the same antibody clone in a different buffer formulation.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-NSDHL antibody

[EPR14490] - BSA and Azide free (ab251016)

This data was developed using <u>ab190353</u>, the same antibody clone in a different buffer formulation.Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling NSDHL with <u>ab190353</u> at 1/100 dilution. Secondary antibody HRP Polymer for Rabbit IgG prediluted. Counter stain Hematoxylin. Negative control also shown. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



production

specificity

free (ab251016)

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Anti-NSDHL antibody [EPR14490] - BSA and Azide

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