# abcam

# Product datasheet

# Anti-StAR antibody ab96637

★★★★★ 3 Abreviews 21 References 5 Images

#### Overview

Product name Anti-StAR antibody

**Description** Rabbit polyclonal to StAR

Host species Rabbit

**Tested applications** Suitable for: ICC, WB, IHC-P

Species reactivity Reacts with: Human

Predicted to work with: Cow, Dog, Pig

**Immunogen** Recombinant protein fragment corresponding to a region within amino acids 15 - 238 of Human

StAR (NP\_000340).

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.00

Preservative: 0.025% Proclin 300

Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

**Applications** 

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# The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab96637 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
ICC		Use at an assay dependent concentration.
WB	<b>★★★★★</b> (3)	1/100 - 1/10000. Predicted molecular weight: 32 kDa.
IHC-P		1/100 - 1/1000.

## **Target**

**Function** Plays a key role in steroid hormone synthesis by enhancing the metabolism of cholesterol into

pregnenolone. Mediates the transfer of cholesterol from the outer mitochondrial membrane to the

inner mitochondrial membrane where it is cleaved to pregnenolone.

**Tissue specificity** Expressed in gonads, adrenal cortex and kidney.

**Pathway** Steroid metabolism; cholesterol metabolism.

Involvement in disease Defects in STAR are the cause of adrenal hyperplasia type 1 (AH1) [MIM:201710]. The most

severe form of adrenal hyperplasia. It is a condition characterized by onset of profound

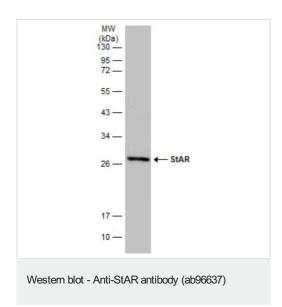
adrenocortical insufficiency shortly after birth, hyperpigmentation reflecting increased production of pro-opiomelanocortin, elevated plasma renin activity as a consequence of reduced aldosterone synthesis, and male pseudohermaphroditism resulting from deficient fetal testicular testosterone synthesis. Affected individuals are phenotypic females irrespective of gonadal sex, and frequently

die in infancy if mineralocorticoid and glucocorticoid replacement are not instituted.

Sequence similarities Contains 1 START domain.

Cellular localization Mitochondrion.

# Images



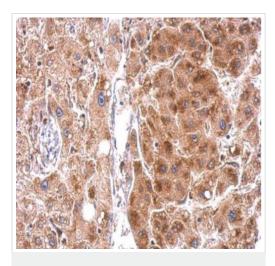
Anti-StAR antibody (ab96637) at 1/1000 dilution + K562 (human chronic myelogenous leukemia cell line from bone marrow ) whole cell lysate at 30  $\mu g$ 

#### **Secondary**

HRP-conjugated anti-rabbit IgG antibody

Predicted band size: 32 kDa

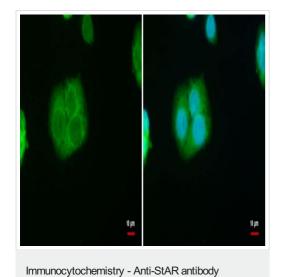
12% SDS-PAGE



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-StAR antibody (ab96637)

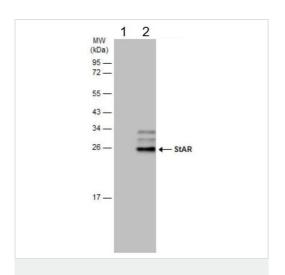
Immunohistochemical analysis of paraffin-embedded human hepatoma tissue staining StAR protein at cytosol with ab96637 at 1/500.

Antigen Retrieval: EDTA based buffer, pH 8.0, 15min.



(ab96637)

Immunofluorescence analysis of 4% paraformaldehyde-fixed HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate labeling StAR protein at mitochondria with ab96637 at 1/500 dilution. Blue: Hoechst 33342 staining.



Western blot - Anti-StAR antibody (ab96637)

All lanes: Anti-StAR antibody (ab96637) at 1/5000 dilution

**Lane 1 :** Non-transfected HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

Lane 2: Transfected HEK-293T whole cell lysate

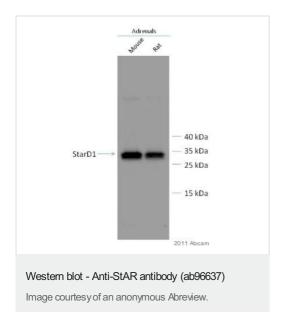
Lysates/proteins at 30 µg per lane.

# Secondary

All lanes: HRP-conjugated anti-rabbit lgG antibody

Predicted band size: 32 kDa

#### 12% SDS-PAGE



All lanes: Anti-StAR antibody (ab96637) at 1/1000 dilution

Lane 1: Whole tissue lysate prepared from murine adrenal gland

Lane 2: Whole tissue lysate prepared from rat adrenal gland

Lysates/proteins at 50 µg per lane.

#### Secondary

**All lanes :** HRP conjugated goat anti-rabbit polyclonal at 1/2500 ....

dilution

Developed using the ECL technique.

Predicted band size: 32 kDa

Exposure time: 20 seconds

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

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