**Product datasheet**

**Anti-StAR antibody ab58013**

**Product name**
Anti-StAR antibody

**Description**
Mouse monoclonal to StAR

**Host species**
Mouse

**Tested applications**
Suitable for: WB, ELISA, IHC-Fr

**Species reactivity**
Reacts with: Mouse, Rat, Human

**Immunogen**
Recombinant fragment: EAMQKALGIL SQNGWKKE QDNGKVMSE VPDVGKVF RLEVVDQPM ERLYEELVER MEAMGEWPN VKEKVLQKI GKDTFITHEL AEEAGNLVG, corresponding to amino acids 81-180 of Human StAR

**General notes**
This product was changed from ascites to tissue culture supernatant on 15 May 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.

**Properties**

**Form**
Liquid

**Storage instructions**
Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

**Storage buffer**
pH: 7.40
Constituent: PBS

**Purity**
Tissue culture supernatant

**Purification notes**
Purified from TCS.

**Clonality**
Monoclonal

**Isotype**
IgG2a

**Light chain type**
Kappa

**Applications**

Our *Abpromise guarantee* covers the use of ab58013 in the following tested applications.

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

- **Western blot - Anti-STaR antibody (ab58013)** at 1/1000 dilution + Mouse liver lysates at 50 µg
  - **Secondary**
    - HRP-conjugated Goat polyclonal to mouse IgG at 1/2500 dilution
    - Developed using the ECL technique.
    - Performed under reducing conditions.
    - **Observed band size**: 27.30 kDa
    - why is the actual band size different from the predicted?
  - **Exposure time**: 5 minutes

### Application
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<tr>
<td>WB</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use at an assay dependent concentration.</td>
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<td>IHC-Fr</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use at an assay dependent concentration. PubMed: 21094146</td>
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</table>
Liver lysates prepared from mouse injected with StarD1 adenovirus expressing recombinant StarD1 protein.

Primary diluted in TBST + 2.5% milk and incubated with sample for 12 hours at 4°C.

This image was generated using the ascites version of the product.

Anti-Star antibody (ab58013) at 1/1000 dilution (in TBST + 2.5% milk for 16 hours at 4°C) + Whole cell lysate of human THP1 cells at 50 µg

**Secondary**

An HRP-conjugated Goat anti-mouse IgG polyclonal at 1/2000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Observed band size:** 30 kDa why is the actual band size different from the predicted?

**Exposure time:** 2 minutes

**Blocking Step:** 5% Milk for 4 hours at 22°C

This image was generated using the ascites version of the product.

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

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