

## 36-3216: Anti-StAR (Steroidogenic Acute Regulator) (Leydig Cell Marker) Monoclonal Antibody(Clone: STAR/2154)

|                                |   |
|--------------------------------|---|
| <b>Clonality :</b>             | Monoclonal  |
| <b>Clone Name :</b>            | STAR/2154   |
| <b>Application :</b>           | IHC   |
| <b>Reactivity :</b>            | Human   |
| <b>Gene :</b>                  | STAR  |
| <b>Gene ID :</b>               | 6770  |
| <b>Uniprot ID :</b>            | P49675  |
| <b>Alternative Name :</b>      | Cholesterol trafficker; Luteinizing hormone induced protein; Mitochondrial steroid acute regulatory protein; StAR; StAR related lipid transfer (START) domain containing 1; StARD1; START domain-containing protein 1; Steroid acute regulatory protein; Steroidogenic acute regulator (STAR); Steroidogenic acute regulatory protein mitochondrial |
| <b>Isotype :</b>               | Mouse IgG1, kappa   |
| <b>Immunogen Information :</b> | Recombinant fragment (around aa 39-108) of human STAR protein (exact sequence is proprietary)   |

### Description

Steroidogenic Acute Regulatory Protein (STAR) controls the rate-limiting step of steroidogenesis by translocating cholesterol from the outer mitochondrial membrane to the inner membrane where it is later cleaved to pregnenolone. It is primarily present in steroid-producing cells, including Leydig cells in the testis, theca cells and luteal cells in the ovary and adrenal cells in the adrenal cortex. Due to low levels of pregnenolone, seminomas and Leydig cell tumors display no specific STAR staining. Therefore, STAR antibody may assist in differentiating sex cord stromal tumors (SCST), seminomas and embryonal carcinomas.

### Product Info

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 20 µg / 100 µg  |
| <b>Content :</b>           | 200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml. |
| <b>Storage condition :</b> | Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.                               |

### Application Note

Immunohistochemistry (Formalin-fixed) (1-2µg/ml for 30 minutes at RT), (Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95 °C followed by cooling at RT for 20 minutes),

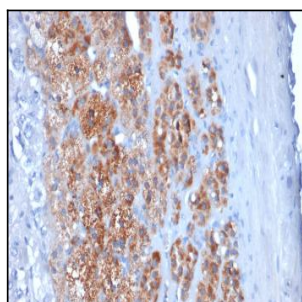


Fig. 1: Formalin-fixed, paraffin-embedded human Adrenal Gland stained with StAR Mouse Monoclonal Antibody (STAR/2154).

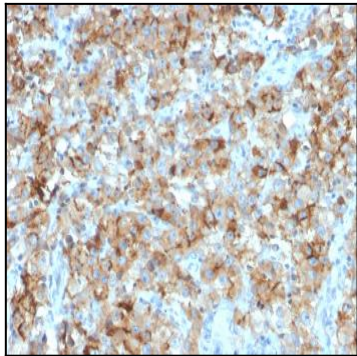


Fig. 2: Formalin-fixed, paraffin-embedded human Testicular Carcinoma stained with StAR Mouse Monoclonal Antibody (STAR/2154).

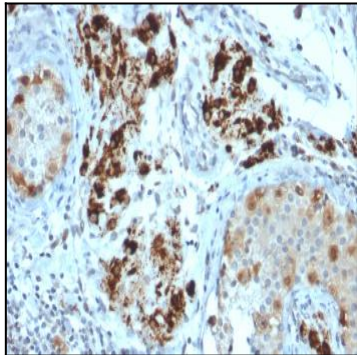


Fig. 3: Formalin-fixed, paraffin-embedded human Testicular Carcinoma stained with StAR Mouse Monoclonal Antibody (STAR/2154).

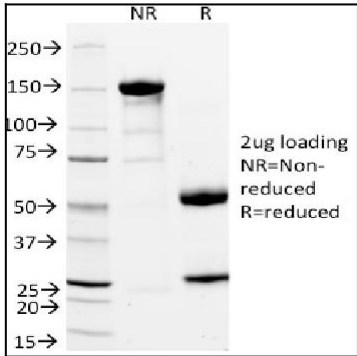


Fig. 4: SDS-PAGE Analysis Purified StAR Mouse Monoclonal Antibody (STAR/2154). Confirmation of Integrity and Purity of Antibody.

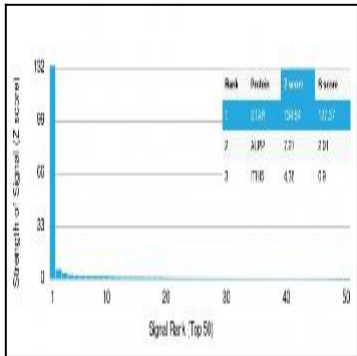


Fig. 5: Analysis of Protein Array containing more than 19,000 full-length human proteins using StAR Mouse Monoclonal Antibody (STAR/2154). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.