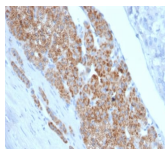


# StAR Monoclonal Mouse Antibody (STAR/2140)



## Product 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.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 2140, Anti-StAR (STAR/2140)**

Call us : [800-304-5357](tel:800-304-5357) Email: [techsupport@biotium.com](mailto:techsupport@biotium.com)

## Product attributes

Antibody number	#2140
Antibody reactivity (target)	StAR
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	STAR/2140
Isotype	IgG2b, kappa
Molecular weight	~30 kDa
Synonyms	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
Human gene symbol	STAR
Entrez gene ID	6770
SwissProt	P49675
Unigene	521535
Immunogen	Recombinant fragment (around aa 39-108) of human STAR protein (exact sequence is proprietary)
Verified antibody applications	IHC (FPPE) (verified)
Antibody target cellular localization	Mitochondria
Species reactivity	Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunohistology (formalin): 1-2 ug/mL for 30 minutes at RT. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 minutes followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined by user
Positive control	K-562 cells. Adrenal or Testicular Carcinoma
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C. Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Validated in protein array	Monospecific
Antibody research areas	Endocrinology
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
Cell/tissue expression	Adrenal gland, Ovary, Testis

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
BNC74	CF®740	742/767	633-685	775/50	<a href="#">CF®740 Features</a>
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

This datasheet was generated on August 26, 2025 at 04:20:47 PM. Visit product page to check for updated information before use.

Product link: <https://biotium.com/product/star-monoclonal-mouse-antibody-star-2140/>