

Website: thermofisher.com Customer Service (US): 1 800 955 6288 ext. 1 Technical Support (US): 1 800 955 6288 ext. 441 thermofisher.com/contactus

> Performance guaranteed

Thermo Fisher

SCIENTIFIC

Product data sheet

STAR Polyclonal Antibody

Catalog Number PA5-21687

_			
Details		Species Reactivity	
Size	100 µL	Species reactivity	Human, Mouse
Host/Isotope	Rabbit / IgG	Published species	Human, Mouse
Class	Polyclonal	Tested Applications	Dilution *
Туре	Antibody	Immunohistochemistry (Paraffin) (IHC (P))	1:100-1:1,000
Immunogen	Recombinant fragment corresponding to a region within amino acids 15 and 268 of STAR (Uniprot ID#P49675)	Western Blot (WB)	1:100-1:10,000
		Immunocytochemistry (ICC/IF)	1:100-1:1,000
Conjugate	Unconjugated	Published Applications	
Form	Liquid	Western Blot (WB)	See 2 publications below
Concentration	0.2 mg/mL	* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.	
Purification	Antigen affinity chromatography		
Storage buffer	PBS, pH 7, with 20% glycerol, 1% BSA		
Contains	0.025% ProClin 300		
Storage Conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.		

Product specific information

Recommended positive controls: K562, mouse kidney, STAR-transfected 293T. Predicted reactivity: Mouse (90%), Rat (89%), Dog (93%), Cat (89%), Pig (90%), Sheep (86%), Rhesus Monkey (98%), Bovine (87%). Store product as a concentrated solution. Centrifuge briefly prior to opening the vial.

Background/Target Information

Steroidogenic acute regulatory protein (StAR) plays a significant role in cholesterol transport from the cytoplasmic outer membrane to the inner mitochondrial membrane. The 37 kDa precursor is cleaved to generate an active 28 kDa protein capable of facilitating cholesterol metabolism into pregnenolone. StAR is prevalently expressed in mitochondria of steroid-producing adrenal and gonadal tissue. Abnormalities in StAR gene expression are impacted in autosomal Lipoid Congenial Adrenal Hyperplasia (LCAH) resulting in defects in pregnenolone and cortisol synthesis. The mechanism of cholesterol binding to StAR has yet to be elucidated.

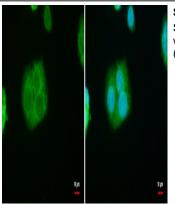
For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ('Documentation'). No claim of sutability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by property trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample.

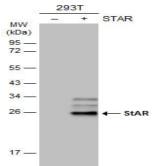
NO OTHER WARRANTES, EXPRESS OR IMPLED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLED WARRANTES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURFOGS. OR NON INFRINCEMENT. BUYFER'S EXCLUSIVE ENDERING THE MON-CONFORMING FRODUCTS DURING THE WARRANTY PERCID IS LIMITED TO REPAR, REPLACEMENT OF OR REFUND FOR REFUND FOR ROMING FRODUCTS JULING THE WARRANTY FOR DIS LIMITED TO REPAR, REPLACEMENT OF OR REFUND FOR ROMING FRODUCTS JULING THE WARRANTY FOR DIS LIMITED TO REPAR, REPLACEMENT OF OR REFUND FOR ROMING FRODUCTS JULING THE INO OBLIGATION TO REPAR, REPLACE OR REFUND FOR ROMULTO F() ACCIDENTIAL THE WARRANTY FOR DIS LIMITED TO REPAR, REPLACEMENT OF OR REFUND FOR ROMING FRODUCTS JULING THE WARRANTY FOR THE DIS DIS LIMITED AND AND THE MONOTORY OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR I(I) MIRPOPER STORAGE AND HANDLING OF THE PRODUCTS. JULING THE documentation accompanying the Product, the Product is Intended for research only and is not to be uses, existion of two the replacitue uses, a vity of explication to human or animals.

Product Images For STAR Polyclonal Antibody



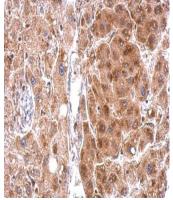
STAR Antibody (PA5-21687) in ICC/IF

STAR Polyclonal Antibody detects StAR protein at mitochondria by immunofluorescent analysis. Sample: HepG2 cells were fixed in 4% paraformaldehyde at RT for 15 min. Green: StAR protein stained by STAR Polyclonal Antibody (Product # PA5-21687) diluted at 1:500. Blue: Hoechst 33342 staining.



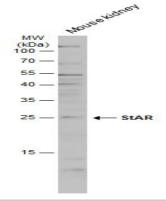
STAR Antibody (PA5-21687) in WB

Western Blot analysis of STAR was performed by separating 30 µg of non-transfected (–) and transfected (+) 293T whole cell extracts by 12% SDS-PAGE. Proteins were transferred to a membrane and probed with a STAR Polyclonal Antibody (Product # PA5-21687) at a dilution of 1:5000. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody.



STAR Antibody (PA5-21687) in IHC (P)

STAR Polyclonal Antibody detects StAR protein at cytosol on human hepatoma by immunohistochemical analysis. Sample: Paraffin-embedded hepatoma. STAR Polyclonal Antibody (Product # PA5-21687) dilution: 1:500. Antigen Retrieval: EDTA based buffer, pH 8.0, 15 min.



STAR Antibody (PA5-21687) in WB

Western Blot using STAR Polyclonal Antibody (Product # PA5-21687). Mouse tissue extract (50 µg) was separated by 12% SDS-PAGE, and the membrane was blotted with STAR Polyclonal Antibody (Product # PA5-21687) diluted at 1: 500. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody, and the signal was developed with Trident ECL plus-Enhanced.

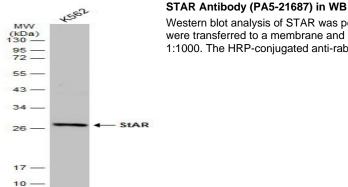
Thermo Fishe

SCIENTIFIC

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, his warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sampl furnished to Buyer de the general type and quality of goods and does not represent that any Product will confirm to such model.

NO OTHER WARRANTES, EXPRESS OR IMPLED, ABE GRANTED INCLUDING WITHOUT LIMITATION, IMPLED WARRANTES, FOR ANY PARTICULA PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTE PERIOD IS LIMITED TO REFAIR, REPLACEMENT OF OR REFLING FOR ORTHEN NOT RED WARRANTES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULA PURPOSE, OR NON INFRINCEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTES PERIOD IS LIMITED TO REFAIR, REPLACEMENT OF OR REFLING FOR THE NON-CONFORMING PRODUCTS) AT SELERES SOLUTION TO REPAIR, REPLACE OR REFUND FOR ROTAL TO FORCE MALENE. (I) MISUSE. FAULT OR NECLIGENCE OF OR BY BUYER, (II) USE OF THE PRODUCTS IN A MANIER FOR WHICH THEY WEEK NOT DEGISIORED, OR NOT TO REPAIR, REPLACE OR REFUND FOR STADUCTS. To research only and is not to be used for any other purpute uses, including without inflation, unanticidae commensional uses, in vitro diagnostic uses, or vitro de application to human or animals.



Western blot analysis of STAR was performed by separating 30 µg of whole cell extract by 12% SDS-PAGE. Proteins were transferred to a membrane and probed with a STAR Polyclonal Antibody (Product # PA5-21687) at a dilution of 1:1000. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody.

STAR Antibody (PA5-21687) in WB

ve⁶⁶ (Ca) 95-72-65-43-34-28- ← SAR 17-10Western Blot using STAR Polyclonal Antibody (Product # PA5-21687). Whole cell extract (30 µg) was separated by 12% SDS-PAGE, and the membrane was blotted with STAR Polyclonal Antibody (Product # PA5-21687) diluted at 1: 1,000. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody.

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package insents ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by property trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sampl furnished to Uper is merely illustrative of the general type and quality of goods and does not represent that any Product will confirm to such model.

NO OTHER WARRANTIES, EXPRESS OR IMPLED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(5) AT SELEXES SOLE OPTION. THERE IS NO OBLIGATION TO REFAIR, REPLACE OR REFUND FOR REPOLDE TO REFUND FOR THE NON-CONFORMING PRODUCT(5) AT SELEXES SOLE OPTION. THERE IS NO OBLIGATION TO REFAIR, REPLACE OR REFUND FOR RRODUCTS AS THE RESULT OF (II) ACCIDENT, DISASTER OR EVENT OF FORCE MALEURE, (II) MISUSE, FAULT OR NECLIGENCE OF OR BY BUYER, (II) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPERS TORAGE AND HANDLING OF THE PRODUCTS. IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPERS TORAGE AND HANDLING OF THE PRODUCTS. IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPERS TORAGE AND HANDLING OF THE PRODUCTS. IN A MANNER FOR WICH THEY WERE NOT DESIGNED, OR (IV) IMPROPERS TORAGE AND HANDLING OF THE PRODUCTS. IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPERS TORAGE AND HANDLING OF THE PRODUCTS. IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPERS TORAGE AND HANDLING OF THE PRODUCTS. IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPERS TORAGE AND HANDLING OF THE PRODUCT. IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPERS TORAGE AND HANDLING OF THE PRODUCT. IN A MANNER FOR WHICH THEY WERE NOT DESIGNED AND HANDLING OF THE PRODUCT. IN A MANNER FOR WHICH THEY WERE NOT DESIGNED AND HANDLING OF THE PRODUCT. IN A MANNER FOR WHICH THEY WERE NOT DESIGNED AND HANDLING OF THE PRODUCT. IN A MANNER FOR WHICH THEY WERE NOT AND HANDLING OF THE PRODUCT. THE ROUTH THE ADDITION TO THE PRODUCT. THE ROUTH THE ADDITION TO THE R

Thermo Fisher

SCIENTIFIC

PubMed References	For STAR Polyclonal Antibody
2 Western Blot Referen	ices
Species / Dilution	Summary
Human / 1:20	PA5-21687 was used in Western Blotting to determine the mRNA and protein expression levels, and cellular localization of steroidogenic pathway enzymes in the DU145 cell line in response to ZEB1 silencing.
	Oncology reports (2019; 41: 1275) "Silencing of the transcriptional factor ZEB1 alters the steroidogenic pathway, and increases the concentration of testosterone and DHT in DU145 cells." Author(s):Herrera D,Orellana-Serradell O,Villar P,Torres MJ,Paciucci R,Castellón EA,Contreras HR PubMed Article URL:http://dx.doi.org/10.3892/or.2018.6885
Mouse / Not Cited	PA5-21687 was used in western blot to investigate the effect of menaquinone-4 on testosterone production in vitro and in vivo
	Lipids in health and disease (2011; 10:) "Menaquinone-4 enhances testosterone production in rats and testis-derived tumor cells." Author(s):Ito A,Shirakawa H,Takumi N,Minegishi Y,Ohashi A,Howlader ZH,Ohsaki Y,Sato T,Goto T,Komai M PubMed Article URL:http://dx.doi.org/10.1186/1476-511X-10-158

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, init, warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnities to Buyers in the intende of the general type and quality of goods and does not represent that any Poduct will confirm to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SILLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJELIKE'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJELIKE'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJELIKE'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJELIKE'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS NA ANAMERE FOR WHICH THEY WERE NOT DESIGNABLE, (II) MISUSE, ADD HANDLING OF THE PRODUCTS. UNA MANNER FOR WHICH THEY WERE NOT DESIGNABLE, OR (II) MIPPOPER STORAGE ADD HANDLING OF THE PRODUCTS. UNA MANNER FOR WHICH THEY WERE NOT DESIGNABLE, OR (II) MIPPOPER STORAGE ADD HANDLING OF THE PRODUCTS. UNders advected as the advected on the Product or in the documentation accompanying the Product, is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

Thermo Fisher