

Polyclonal Antibody to StAR - Aff - Purified

Alternate names:	StARD1
Catalog No.:	SP5227P
Quantity:	0.1 mg
Concentration:	1.0 mg/ml
Background:	Steroid hormone biosynthesis is acutely regulated by pituitary trophic hormones and other steroidogenic stimuli. This regulation requires the synthesis of a protein whose function is to translocate cholesterol from the outer to the inner mitochondrial membrane in steroidogenic cells, the rate-limiting step in steroid hormone formation. The steroidogenic acute regulatory (StAR) protein is an indispensable component in this process. StAR is expressed in steroidogenic tissues in response to agents that stimulate steroid production, and mutations in the StAR gene result in congenital lipoid adrenal hyperplasia, a disease in which steroid hormone biosynthesis is severely compromised. The mechanism by which StAR mediates cholesterol transfer in the mitochondria has not been fully characterized. However, the tertiary structure of the START domain of a StAR homolog has been solved, and identification of a cholesterol-binding hydrophobic tunnel within this domain raises the possibility that StAR acts as a cholesterol-shuttling protein.
Host:	Rabbit
Immunogen:	Recombinant StAR protein
Format:	State: Liquid IgG fraction Purification: Affinity chromatography Buffer System: PBS containing 1 mg/ml BSA as stabilizer and 0.05% sodium azide as preservative
Applications:	Immunohistochemistry on paraffin sections. Western blot: 1/1,000. Detects an ~30 kDa protein (tested with rat adrenal gland tissue extracts). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	SP5227P reacts with steroidogenic acute regulatory (StAR) protein. Species: Human, rat. Other species not tested.
Storage:	Store (in aliquots) at -20°C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	J. Biol. Chem. Jul 2006; 281: 21535-21545. Endocrinology doi:10. 210/en. 2005-0567, Aug 2005. Endocrinology Vol 145(3), 1227-1237, Mar 2004. Endocrinology Vol 145(10), 4775-4780, Sept 2004.

Pictures:

Western blot of StAR on rat adrenal gland extract using SP5227P

