

**StAR (D10H12) XP® Rabbit mAb**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP, IF-IC	H M R	Endogenous	28	Rabbit IgG	#P49675	6770

**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation  
Immunofluorescence (Immunocytochemistry)

**Dilution**

1:1000  
1:50  
1:100 - 1:200

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

StAR (D10H12) XP® Rabbit mAb recognizes endogenous levels of total StAR protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Arg272 of human StAR protein.

**Background**

Steroidogenic acute regulatory protein (StAR) plays a significant role in cholesterol transport from the cytoplasmic outer membrane to the inner mitochondrial membrane (1). The 37 kDa precursor is cleaved to generate an active 28 kDa protein capable of facilitating cholesterol metabolism into pregnenolone (2,3). StAR is prevalently expressed in mitochondria of steroid-producing adrenal and gonadal tissue (3). Abnormalities in StAR gene expression are impacted in autosomal Lipoid Congenital Adrenal Hyperplasia (LCAH) resulting in defects in pregnenolone and cortisol synthesis (4). The mechanism of cholesterol binding to StAR has yet to be elucidated (4).

**Background References**

1. Caron, K.M. et al. (1997) *Proc Natl Acad Sci U S A* 94, 11540-5.
2. Bose, H.S. et al. (1999) *Proc Natl Acad Sci U S A* 96, 7250-5.
3. Manna, P.R. et al. (2002) *Biol Reprod* 67, 1393-404.
4. Roostaei, A. et al. (2008) *Biochem J* 412, 553-62.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry)

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **R:** Rat

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