

## Datasheet for ABIN1393303

# anti-SPR antibody (AA 101-200) (Biotin)



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Quantity:	100 μL	
Target:	SPR	
Binding Specificity:	AA 101-200	
Reactivity:	Human, Mouse, Rat	
Host:	Rabbit	
Clonality:	Polyclonal	
Conjugate:	This SPR antibody is conjugated to Biotin	
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))	
Product Details		
Immunogen:	KLH conjugated synthetic peptide derived from human Sepiapterin reductase	
Isotype:	IgG	
Cross-Reactivity:	Human, Mouse, Rat	
Predicted Reactivity:	Pig,Horse,Rabbit	
Purification:	Purified by Protein A.	
Target Details		
Target:	SPR	
Alternative Name:	SPR/Sepiapterin reductase (SPR Products)	

#### Target Details

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Synonyms: SDR38C1, Sepiapterin reductase 7,8 dihydrobiopterin:NADP+ oxidoreductase, Sepiapterin reductase, Short chain dehydrogenase/reductase family 38C, member 1, SPR, SPRE\_HUMAN.

Background: SPR, also known as sepiapterin reductase, is a homodimeric cytoplasmic protein that belongs to the sepiapterin reductase family. SPR functions as an NADH-dependent aldoketo reductase and specifically catalyzes the reduction of pteridine derivatives. In addition, SPR plays an important role in tetrahydrobiopterin (BH4) biosynthesis, catalyzing the final reduction step of the synthesis pathway. BH4 is an essential cofactor for the hydroxylation of the aromatic amino acids (tryptophan, tyrosine and phenylalanine) and is required for proper dopamine synthesis. Mutations in the gene encoding SPR can cause sepiapterin reductase deficiency, a monoamine neurotransmitter deficiency without hyperphenylalaninemia. Sepiapterin reductase deficiency interferes with BH4 synthesis, resulting in DOPA-responsive dystonia and a variety of other human diseases. In addition, SPR mRNA expression is increased in the brain of Parkinson?s Disease (PD) patients, suggesting that SPR may play a role in PD.

Pathways:

Regulation of Systemic Arterial Blood Pressure by Hormones, Feeding Behaviour, Smooth Muscle Cell Migration

## **Application Details**

**Application Notes:** 

WB 1:300-5000

IHC-P 1:200-400

IHC-F 1:100-500

Restrictions:

For Research Use only

#### Handling

Format:	Liquid
Concentration:	1 μg/μL
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

# Handling

Storage Comment:	Store at -20°C for 12 months.
Expiry Date:	12 months