

## Product datasheet for **TA392608S**

### Steroidogenic Factor 1 (NR5A1) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:500~1:1000
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to Human SF1.
Specificity:	SF1 polyclonal antibody detects endogenous levels of SF1 protein.
Formulation:	Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2
Concentration:	1mg/ml
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.
Stability:	1 year
Predicted Protein Size:	~ 48 kDa
Gene Name:	nuclear receptor subfamily 5 group A member 1
Database Link:	<a href="#">Entrez Gene 2516 Human Q13285</a>



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**Background:**

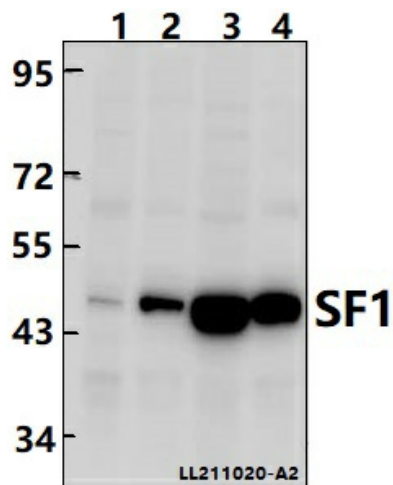
The orphan nuclear receptor, steroidogenic factor 1 (STF-1, also called Ad4BP), is encoded by the NR5A1 gene and plays an instrumental role in directing the transcriptional control of steroidogenesis. Initially identified as a tissue-specific transcriptional regulator of cytochrome P450 steroid hydroxylases, research studies of both global and tissue-specific knockout mice have demonstrated that STF-1 is required for the development of adrenal glands, gonads, ventromedial hypothalamus, and for the proper functioning of pituitary gonadotropes. Indeed, humans with mutations that render STF-1 transcriptionally inactive can present with testicular failure, ovarian failure, and adrenal insufficiency. Furthermore, dysregulation of STF-1 has been linked to diseases such as endometriosis and adrenocortical carcinoma. Like other nuclear hormone receptors, STF-1 has a modular domain structure composed of an amino-terminal zinc finger DNA-binding domain, a ligand-binding domain, a carboxy-terminal AF-2 activation domain, and a hinge region with AF-1-like activation activity. STF-1 also contains a fushi tarazu factor 1 box, which functions as an accessory DNA binding domain. STF-1 is primarily phosphorylated at Ser203, which is thought to enhance its transcriptional activity by promoting complex formation with transcriptional cofactors. In addition to phosphorylation at Ser203, STF-1 is subject to SUMO conjugation and acetylation at  $\epsilon$ -amino groups of target lysine residues. Whereas SUMOylation represses STF-1 function, acetylation enhances its transcriptional activity.

**Synonyms:**

Adrenal 4-binding protein; Fushi tarazu factor homolog 1; hSF-1; Nuclear receptor subfamily 5 group A member 1; SF-1; Steroid hormone receptor Ad4BP; Steroidogenic factor 1; STF-1

**Note:**

For research use only, not for use in diagnostic procedure.

**Product images:**

Western blot (WB) analysis of SF1 polyclonal antibody at 1:1000 dilution. Lane 1: Hela whole cell lysate (40ug); Lane 2: HepG2 whole cell lysate (40ug); Lane 3: HEK293T whole cell lysate (40ug); Lane 4: U-87MG whole cell lysate (40ug).