

Product datasheet for **AP05312PU-N**

SR-alpha / SRPR Sheep Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	Western blot (1-5 µg/ml). Also can be used to immunoprecipitate both subunits of SRP receptors under non-denaturing conditions.
Reactivity:	Canine, Chicken
Host:	Sheep
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein corresponding to amino acids 39-295 which includes part of the amino terminal SRbeta binding region and the hinge region between it and the carboxyl-terminal GTPase domain.
Specificity:	This antibody detects SRPR alpha.
Formulation:	Phosphate buffered saline with 0.08% sodium azide State: Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store the product (in aliquots) at -20 °C. Can be shipped at 2 - 8 °C. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Database Link:	P06625



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Background:

The receptor for Signal Recognition Particle (SRP) is the site on the endoplasmic reticulum that ribosomes translating secreted and integral membrane proteins are initially targeted to. Once the ribosome-SRP complex arrives at the SRP receptor the protein being translated is transferred to the translocation complex (Sec61) in the ER membrane. The SRP receptor is composed of two subunits SRalpha and SRbeta. The SRalpha subunit is a translocation GTPase peripherally bound to the endoplasmic reticulum by its interaction with SRbeta. SRalpha also binds to the GTPase of SRP (SRP54) and these two proteins appear to function as each others GTPase activating proteins (GAPs). Hydrolysis of GTP by SRalpha and SRP54 is thought to be involved in transfer of the nascent protein to the Sec61 complex in the ER. SRalpha has an apparent molecular weight of 72 kDa. SRbeta is a Type I transmembrane protein that spans the membrane once and contains Ras type GTPase domain. The function of the GTPase in SRbeta is unknown. The membrane spanning domain is at the amino-terminus of SRbeta. The GTPase domain encompasses three quarters of the protein and is carboxyl- of the transmembrane region. SRalpha binds to the GTPase domain of SRbeta. Heterodimerization of SRalpha and SRbeta masks the carboxyl-terminal epitope of SRbeta.

Synonyms:

Signal recognition particle receptor subunit alpha, SR alpha, Docking protein alpha, DP-alpha