

32-4962: Recombinant Human Signal Recognition Particle 54kDa

Alternative Name : Signal Recognition Particle 54 kDa protein

Description

Source : Sf9 insect cells. SRP54 is a full-length cDNA coding for the human SRP54 protein having a molecular mass of 56,528 Dalton (pH 8.9). SRP54 protein is fused to a hexa-histidine purification tag. SRP54 is a 54-kDa subunit of the signal recognition particle (SRP), a cytoplasmic ribonucleoprotein complex which leads the translocation of newly synthesized secretory proteins from the polysome to the endoplasmic reticulum. SRP is composed of six polypeptides and a tRNA-like molecule known as 7SL RNA. SRP54 is a GTP-binding protein that directly binds the signal sequences of nascent secretory and membrane proteins. Anti-SRP autoantibodies take place in patients with an autoimmune chronic muscle inflammation called polymyositis. These auto-antibodies predominantly recognize the SRP54 subunit and in addition are able to immunoprecipitate several of the SRP subunits and the RNA component. Nearly 5% of myositis patients are positive for anti-SRP autoantibodies, increasing to 18% in the subgroup of Jo-1 autoantibody-negative patients. The classic 'anti-SRP syndrome' is a severe form of polymyositis in which the myositic inflammation is acute and aggressive onset, with common myalgias and cardiac involvement. Normally there is a poor reaction to therapy with a 5-year survival rate of about 25%.

Product Info

Amount :	20 µg
Purification :	Greater than 80% as determined by SDS-PAGE.
Content :	SRP54 is supplied in 16mM HEPES buffer pH-8.0, 400mM NaCl, and 20% glycerol.
Storage condition :	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. Avoid multiple freeze-thaw cycles.