



## Rheumatoid arthritis and Apoptosis

### Anti Human S19 Ribosomal Protein Polyclonal Antibody

S19 Ribosomal protein consists of 145 amino acids with a predicted molecular weight of 16 kD. The cross-linked homo-dimer from apoptosis cells has been proved to exhibit the monocyte chemotactic activity. Also it is related with rheumatoid arthritis.

Futhermore, the mutations of the gene encoding this protein are associated with Diamond-Blackfan anaemia, a constitutional erythroblastopenia characterized by absent or decreased erythroid precursors.

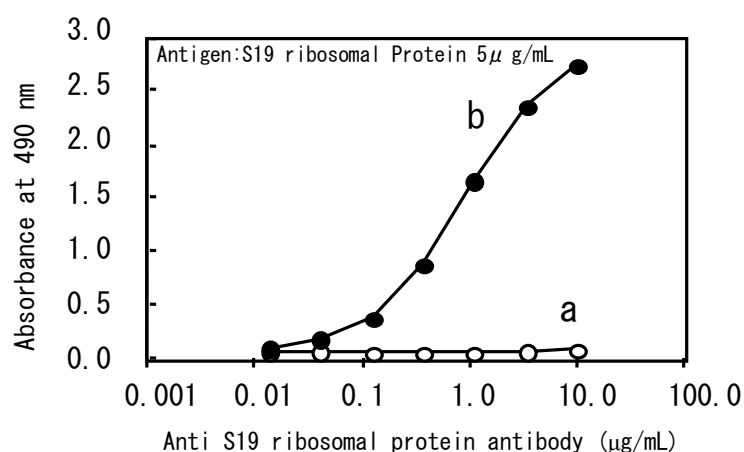
This antibody was purified from the serum of the rabbit immunized with S19 recombinant protein, and has been proved to be useful for the immunoblotting.

Package Size	100 $\mu$ g
Format	Rabbit polyclonal antibody purified by Protein G affinity chromatography, lyophilized.
Buffer	PBS [containing 2% Block Ace as a stabilizer, 0.1%Proclin as a bacteriostat]
Storage	Store below $-20^{\circ}\text{C}$ until needed. When you use, dissolve in 100 $\mu$ l of water and freeze aliquots.
Purification method	This antibody was purified from rabbit serum by Protein G affinity chromatography.
Working dilution for immunoblotting:	1-5 $\mu$ g/mL

Detecting S19 protein in  
HepG2 Cell Homogenate



Reactivity in ELISA



a: Non immuned rabbit antibody

b: Anti S19 ribosomal protein antibody



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**【References】**

1. H.Nishiura, Y.Shibuya, S.Matsubara, S.Tanase, T.Kanbara & T.Yamamoto.(1996): Monocyte chemotactic factor in rheumatoid arthritis synovial tissue. Probably a cross-linked derivative of S19 ribosomal protein. *J.Biol.Chem.*271(2): 878-882
2. T.Yamamoto, H.Nishiura & H.Nishida (1996): Molecular mechanisms to form leukocyte infiltration patterns distinct between synovial tissue and fluid of rheumatoid arthritis. *Seminars Thrombos.Hemost.*22(6) : 507-511
3. Kei Horino, Hiroshi Nishiura, Tomofumi Ohsako, Yoko Shibuya, Takehisa Hiraoka, Nobuo Kitamura, and Tetsuro Yamamoto,(1998): A Monocyte Chemotactic Factor, S19 Ribosomal Protein Dimer,in Phagocytic Clearance of Apoptotic Cells. *Lab Invest* 78 : 603-617
4. Ntalia Draptchinskaia, Peter Gustavsson, Bjorn Andersson, Monica Petterson, Thiebaut-Noel Willing, Irma Dianzani,Sarah Ball, Gill Tchernia, Joakim Klar, Hans Matsson, Dimitri Tentler, Narla Mohandas, Birgit Carlsson & Niklas Dahl.(1999) : The gene encoding ribosomal protein S19 is mutated in Diamond-Blackfan anaemia. *Nature Genetics.*21 : 169-175
5. Arjun Shrestha, Kei Horino, Hiroshi Nishiura, and Tetsuro Yamamoto.(1999): Acquired Immune Response as a Consequence of the Macrophage-Dependent Apoptotic Cell Clearance and Role of the Monocyte Chemotactic S19 Ribosomal Protein Dimer in This Connection. *Laboratory Investigation.*79(12): 1629-1642

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