

32-13771: ESAT6-CFP10

Alternative Name : Early Secretory Target Mycobacterium Tuberculosis, ESAT-6

Description

Source: Escherichia Coli.

Physical Appearance: Sterile Filtered clear solution.

Biological Activity: null

Mycobacterium antigen ESAT6 has been isolated from low molecular weight fractions of the short-term-culture filtrate (ST-CF) and it can easily be detected in tuberculosis patients. The export of ESAT-6 which is a potent T-cell antigen, and related proteins requires a dedicated secretory apparatus that is encoded by a group of genes, several of which also code for proteins that are recognized strongly by T cells. The ESAT-6 systems can consequently be considered as immunogenicity islands and there is mounting evidence that the equivalent genes are subject to selective pressure imposed by the immune system of the host. This antigen includes many epitopes detectable in the serum of most patients with tuberculosis (more than 90%). By the attempts to obtain the vaccine on the basis of ESAT-6 it was demonstrated that the optimization of adjuvant is very important when using the combination of dioctadecylammonium bromide and monophosphoryllipide. ESAT-6 is very potential as diagnostic for differentiation between the mycobacterial infection and BCG vaccination. The main topic in ESAT-6 using is in antibody production and in test-systems for tuberculosis elaboration. Early secretory antigen 6 (ESAT6) and cell filtrate protein 10 (CFP10) are 2 antigens secreted as a complex by the replicating Mycobacterium tuberculosis complex (MTC).

Recombinant Chimeric ESAT6-CFP10 produced in E. coli is fused to a 6 amino acid his tag at its C-terminus and purified by proprietary chromatographic technique.

Product Info

Amount : 0.5 mg / 100 µg

Purification : Protein is >95% pure as determined by 12% PAGE (coomassie staining).

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. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.