

32-4374: Recombinant Salmonella Enteritidis Outer Membrane Protein-A

Alternative Name : Outer Membrane Protein-A,OmpA.

Description

Source : Escherichia Coli. The Recombinant Salmonella Enteritidis Outer Membrane Protein A, E.Coli derived, 330 amino acids, contains the ompA immunodominant regions. The protein is fused to a His tag at C-terminal and purified by standard chromatography techniques. The OmpA protein is one of the main outer-membrane proteins of a large array of Gram-negative bacteria such as A.salmonicida, Shigella dysenteriae and E.coli.OmpA's major physiological functions include maintenance of the structural integrity and morphology of the cells and porin activity, as well as a role in conjugation and bacteriophage binding.Achromogenic atypical Aeromonas salmonicida is the causative agent of goldfish ulcer disease.Virulence of this bacterium is associated with the production of a paracrystalline outer membrane A-layer protein.The species specific structural gene for the monomeric form of A-protein was cloned into a pET-3d plasmid in order to express and produce a recombinant form of the protein in E.coli BL21(DE3). The induced protein was isolated from inclusion bodies by a simple solubilization-renaturation procedure and purified by ion exchange chromatography on Q-Sepharose to over 95% pure monomeric protein.Recombinant A-protein was compared by biochemical, immunological and molecular methods with the A-protein isolated from atypical A.salmonicida bacterial cells by the glycine and the membrane extraction methods.

Product Info

Amount :	0.5 mg
Purification :	Protein is >95% pure as determined by 10% PAGE (coomassie staining).
Content :	PBS.
Storage condition :	OmpA S.Enteritidis Recombinant although stable at 4°C for 1 week, should be stored below -18°C. Please prevent freeze thaw cycles.

Application Note

Immunoassay. Outer membrane protein A (ompA) of S. Enteritidis is a protein directly exposing to outside of this organism, In hens, the production of antibodies against outer membrane protein A (ompA) during the infection has been demonstrated by inoculating both the complete bacterium and expressed protein produced from ompA DNA vaccine. Vaccination by ompA protein to hens is a potential tool to control S. enteritidis contaminated eggs into market, and prevent human foodborne disease from eggs.

