

# OmpA Recombinant Protein



RPPB4161

## Product Information Protein Information

### Product SKU:

RPPB4161

### Host:

Escherichia Coli.

### Protein description:

The recombinant form was found to be undistinguishable from the wild type when examined by SDS-PAGE and gel filtration chromatography yielding a 48 kDa monomeric protein. The immunological similarity of the protein samples was demonstrated by employing polyclonal and monoclonal antibodies in ELISA and Western Blot techniques. All forms of A-protein were found to activate the secretion of tumour necrosis factor alpha from murine macrophage. For ref see Maurice et al. (1999) Protein Expression and Purification 16, 396-404. The OmpA is purified by proprietary chromatographic techniques.

### Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Synonyms:

Outer Membrane Protein-A, OmpA.

### Formulation:

The OmpA protein was lyophilized from a concentrated (1mg/ml) solution with 0.02% NaHCO<sub>3</sub>.

### Purity:

Greater than 98.0% as determined by:(a) Analysis by SEC-HPLC.(b) Analysis by SDS-PAGE.

### Solubility:

It is recommended to reconstitute the lyophilized OmpA in sterile 0.4% NaHCO<sub>3</sub>, not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

### Stability:

Lyophilized Bacterial Outer Membrane Protein-A although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon C between 2-7 days and for future use reconstituted OmpA should be stored at 4 below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please avoid freeze-thaw cycles.

### Amino Acid Sequence:

mdvispndn tfvttslasv tkqpvldfst aqqnltnfs evgdlknngf ivleiqgegq fndaeirqwl sngfwrrpft gllvnpndhg  
nfansgevdn vrkffkiisd gtqltivhti dsngkrlrla lasdveetin fadaevelkl nlanqafkl sgsqgtvalt agalwnasyt  
adpvtatplf klglfqsl tnagkatalv segflknig danisatdfa itnvttnqti qrdkvnltlt gdvsafkkda ngnlvnkaga  
sigwkaaadg qsatavlgag nmaggvqnal aafgtlyvaa dntvpvpavn fnvkaeiqgd sqatynyfkd eladlfiltr dgmkfdtitt  
gttsanlihi rdvsnilpte ggkifvtite yadhaangrg egtvlvtrka lsvtlpsgga vtlkpadvaa dvgasitagr qarlvfevet  
nqgevavkks naegvdiqng trgtaplvdv tl.

### Biological Activity:

The interaction of bacterial and recombinant A-layer protein with murine macrophages was directed at determining the effect of A-protein on intracellular events that occur in primed macrophages. This was accomplished by measuring the cytotoxic product produced by peritoneal macrophages when exposed

to A-protein coated latex beads. Thioglycolate elicited macrophages exhibited a low level of activation (18% cytotoxicity) that was significantly increased (48% cytotoxicity) in the presence of latex beads. Coating of the latex beads with each of the three A-protein products resulted in an increase of cytotoxicity (mean  $\pm$  SEM) from 48% to 91%.