



Recombinant Protein Technical Manual

Recombinant Human Neutrophil Cytosol Factor 1/NCF1 Protein (His Tag)

RPES0415

Product Data:

Product SKU: RPES0415

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P14598

Protein Information:

Molecular Mass: 45.6 kDa

AP Molecular Mass: 45-50 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 20mM Tris 100mM NaCl, 1mM DTT, pH8.0.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: NCF; 47 kDa autosomal chronic granulomatous disease protein/47 kDa neutrophil oxidase factor; NCF-47K; Neutrophil NADPH oxidase factor 1; Nox organizer 2; Nox-organizing protein 2/SH3 and PX domain-containing protein 1A; p47-phox

Immunogen Information:

Sequence: Met 1-Val390

Background:

Neutrophil cytosol factor 1 (NCF1) is a 47 kDa cytosolic subunit of neutrophil NADPH oxidase. This oxidase is characterized as a multicomponent enzyme which is activated to produce superoxide anion. NCF2, NCF1, and a membrane bound cytochrome b558 are required for the activation of the latent NADPH oxidase. The human NCF1 gene encodes a 390 amino acids protein without a signal peptide. The NCF1 gene interacts with other subunits of nicotinamide adenine dinucleotide phosphate-oxidase (NADPH) and plays an important role in innate immunity, producing reactive oxygen species and reducing the severity and duration of parasitic infection and autoimmune disease. NCF1 also has a role in T cell activation.