# Recombinant Human NCF2/P67phox Protein (His \& GST Tag) 

Note: Centrifuge before opening to ensure complete recovery of vial contents.

| Description |  |
| :---: | :---: |
| Synonyms | NCF-2;NOXA2;P67-PHOX;P67PHOX |
| Species | Human |
| Expression Host | Baculovirus-Insect Cells |
| Sequence | Met 1-Val526 |
| Accession | AAH01606.1 |
| Calculated Molecular Weight | 87.6 kDa |
| Observed molecular weight | $80-90 \mathrm{kDa}$ |
| Tag | N-His-GST |
| Properties |  |
| Purity | $>90 \%$ as determined by reducing SDS-PAGE. |
| Endotoxin | $<1.0 \mathrm{EU}$ per $\mu \mathrm{g}$ of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to $-80^{\circ} \mathrm{C}$. Reconstituted protein solution can be stored at $4-8^{\circ} \mathrm{C}$ for $2-7$ days. Aliquots of reconstituted samples are stable at $<-20^{\circ} \mathrm{C}$ for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from sterile 20 mM Tris, 500 mM Nacl, $10 \%$ glycerol, pH 7.4 Normally $5 \%-8 \%$ trehalose, mannitol and $0.01 \%$ Tween80 are added as protectants before lyophilization. <br> Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |
| Data |  |


$>90 \%$ as determined by reducing SDS-PAGE.

## Background

NCF2, also known as NCF-2 and p67phox, is a subunit of the multi-protein NADPH oxidase complex. NCF2, NCF1, and a membrane bound cytochrome b558 are required for activation of the latent NADPH oxidase. This oxidase produces a burst of superoxide which is delivered to the lumen of the neutrophil phagosome. Mutations in NCF2 gene, as well as in other NADPH oxidase subunits, can result in chronic granulomatous disease, a disease that causes recurrent infections by catalase-positive organisms.

