| Description |  |
| :---: | :---: |
| Source | Recombinant Human CD83 Protein is expressed from HEK293 with hFc tag at the C-Terminus. |
|  | It contains Thr20-Ala143. |
| Accession | Q01151-1 |
| Molecular Weight | The protein has a predicted MW of 40.8 kDa . Due to glycosylation, the protein migrates to $55-65 \mathrm{kDa}$ based on Tris-Bis PAGE result. |
| Endotoxin | Less than 1EU per $\mu \mathrm{g}$ by the LAL method. |
| Purity | $>95 \%$ as determined by Tris-Bis PAGE |
|  | > 95\% as determined by HPLC |
| Formulation and Storage |  |
| Formulation | Lyophilized from $0.22 \mu \mathrm{~m}$ filtered solution in PBS ( pH 7.4 ). Normally $8 \%$ trehalose is added as protectant before lyophilization. |
| Reconstitution | Centrifuge the tube before opening. Reconstituting to a concentration more than $100 \mu \mathrm{~g} / \mathrm{ml}$ is recommended. Dissolve the lyophilized protein in distilled water. |
| Storage | -20 to $-80^{\circ} \mathrm{C}$ for 12 months as supplied from date of receipt. -20 to $-80^{\circ} \mathrm{C}$ for $3-6$ months in unopened state after reconstitution. $2-8^{\circ} \mathrm{C}$ for $2-7$ days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |
| Background |  |
|  | CD83 is a member of the immunoglobulin (Ig) superfamily and is expressed in membrane bound or soluble forms. Membrane CD83 (mCD83) can be detected on a variety of activated immune cells, although it is most highly and stably expressed by mature dendritic cells (DC). While CD83 is emerging as a promising immune modulator with therapeutic potential, some important aspects such as its ligand/s, intracellular signaling pathways and modulators of its expression are unclear. |

Assay Data
Tris-Bis PAGE

|  | MK | R |
| :---: | :---: | :---: |
| 140KD | - |  |
| 115KD | - |  |
| 80KD | $\underline{\square}$ |  |
| 70KD | ter |  |
| 50KD | $\square$ |  |
| 40KD | - |  |
| 30KD | - |  |
| 25KD | - |  |
| 15KD | - |  |
| 10KD |  |  |

Human CD83 on Tris-Bis PAGE under reduced condition. The purity is greater than $95 \%$.

SEC-HPLC


## ELISA Data

Human CD83, hFc Tag ELISA
$0.05 \mu \mathrm{~g}$ Human CD83, hFc Tag Per Well


Log Biotinylated Anti-CD83 Antibody, hFc Tag Conc.( $\mu \mathrm{g} / \mathrm{ml}$ )

The purity of Human CD83 is greater than 95\% as determined by SEC-HPLC.

Immobilized Human CD83, hFc Tag at $0.5 \mu \mathrm{~g} / \mathrm{ml}$ ( $100 \mu \mathrm{l} / \mathrm{Well}$ ) on the plate. Dose response curve for Biotinylated Anti-CD83 Antibody, hFc Tag with the EC50 $15.3 \mathrm{ng} / \mathrm{ml}$ determined by ELISA.

