| Description |  |
| :---: | :---: |
| Source | Recombinant Human GITR Ligand/TNFSF18 Trimer Protein is expressed from HEK293 with His tag and flag tag at the N -Terminus. |
|  | It contains Gln50-Ser177. |
| Accession | Q9UNG2 |
| Molecular Weight | The protein has a predicted MW of 47.5 kDa . Due to glycosylation, the protein migrates to $50-70 \mathrm{kDa}$ 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 Iyophilization. |
| 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 |  |
|  | Glucocorticoid-induced TNFR-related protein (TNFRSF18, GITR, CD357), expressed by T cells, and its ligand (TNFSF18, GITRL), expressed by myeloid populations, provide co-stimulatory signals that boost T cell activity. Due to the important role that GITR plays in regulating immune functions, agonistic stimulation of GITR is a promising therapeutic concept. |
| Assay Data |  |

Tris-Bis PAGE


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

SEC-HPLC


ELISA Data
Human GITR Ligand Trimer, His Tag ELISA
$0.2 \mu \mathrm{~g}$ Human GITR Ligand Trimer, His Tag Per Well


Log Human GITR, hFc Tag Conc. ( $\mu \mathrm{g} / \mathrm{ml}$ )

The purity of Human GITR Ligand Trimer is greater than $95 \%$ as determined by SEC-HPLC.
mmobilized Human GITR Ligand Trimer, His Tag at $2 \mu \mathrm{~g} / \mathrm{ml}(100 \mu \mathrm{l} / \mathrm{well})$ on the plate. Dose response curve for Human GITR, hFc Tag with the EC50 of $0.44 \mu \mathrm{~g} / \mathrm{ml}$ determined by ELISA.

