

## Recombinant Rat CD80/B7-1 Protein(His Tag)

Catalog Number: GPER0212

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

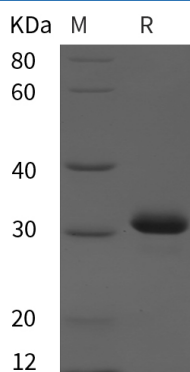
### Description

|               |                                                                      |
|---------------|----------------------------------------------------------------------|
| Species       | Rat                                                                  |
| Source        | E.coli-derived Rat CD80 protein Gly41-Ala262, with an N-terminal His |
| Calculated MW | 24.3 kDa                                                             |
| Observed MW   | 32 kDa                                                               |
| Accession     | G3V671                                                               |
| Bio-activity  | Not validated for activity                                           |

### Properties

|                |                                                                                                                                                                                                                                        |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purity         | > 95% as determined by reducing SDS-PAGE.                                                                                                                                                                                              |
| Endotoxin      | < 10 EU/mg 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 °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 in PBS with 5% Trehalose and 5% Mannitol.                                                                                                                                                  |
| Reconstitution | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.                                                                                               |

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

The B-lymphocyte activation antigen B7-1 (referred to as B7), also known as CD80, is a member of cell surface immunoglobulin superfamily and is expressed on the surface of antigen-presenting cells including activated B cells, macrophages and dendritic cells. As costimulatory ligands, B7-1 which exists predominantly as dimer and the related protein B7-2, interact with the costimulatory receptors CD28 and cytotoxic T lymphocyte-associated antigen 4 (CTLA-4) expressed on T cells, and thus constitute one of the dominant pathways that regulate T cell activation and tolerance, cytokine production, and the generation of CTL. The B7/CD28/CTLA4 pathway has the ability to both positively and negatively regulate immune responses. CD80 is thus regarded as promising therapeutic targets for autoimmune diseases and various carcinomas.