

---

**Product Data Sheet**

---

Product Name: Camrelizumab

Cat. No.: GC62253

**Chemical Properties**

Cas. No. 1798286-48-2

Formula M.Wt 143.69 kDa

Solubility Storage -20°C, protect from light.

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Protocol**

Cell experiment [1]:

Cell lines Peripheral blood mononuclear cells

Preparation Method

Camrelizumab reconstituted in water and diluted in 5% dextrose to a final concentration of 0.11 nM/ 0.38 nM.

Reaction Conditions

0.11 nM/ 0.38 nM

Applications

In the T-cell proliferation assay using peripheral blood mononuclear cells stimulated with tuberculin, Camrelizumab induced T-cell proliferation at an EC<sub>50</sub> of 0.11 nM. In a similar assay measuring the secretion of IFN-gamma, Camrelizumab induced the production of IFN-gamma at an EC<sub>50</sub> of 0.38 nM.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

---

**Product Data Sheet**

---

Animal experiment [2]:

Animal models

Human PD-1 transgenic mice

Preparation Method

Camrelizumab was provided as a lyophilized (freeze-dried) powder; it had to be reconstituted with a specified volume of an appropriate solvent, such as sterile water or saline, to achieve the desired concentration for injection (3 mg/kg).

Dosage form

3 mg/kg, intravenous (iv) injection

Applications

The combination of Camrelizumab (at a dosage of 3 mg/kg) with Apatinib (at dosages of 200 mg/kg and 100 mg/kg) resulted in tumor growth inhibition rates of 63.1% and 87.3%, respectively, in human PD-1 transgenic mice.

**Caution: Product has not been fully validated for medical applications. For research use only.**

**Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com**

**Address: 10292 Central Ave. #205, Montclair, CA, USA**

---

## Product Data Sheet

---

### References:

[1] Jason D Lickliter, et al. A First-in-Human Dose Finding Study of Camrelizumab in Patients with Advanced or Metastatic Cancer in Australia. *Drug Des Devel Ther.* 2020 Mar 18;14:1177-1189.

[2] Kuimin Mei, et al. Camrelizumab in combination with apatinib in second-line or above therapy for advanced primary liver cancer: cohort A report in a multicenter phase Ib/II trial. *J Immunother Cancer.* 2021 Mar;9(3):e002191.

### Background

Camrelizumab (also known as SHR-1210) is a high-affinity, humanized IgG4- $\kappa$  monoclonal antibody. It exhibits a strong binding affinity to PD-1, with a  $K_d$  of 3 nM, and effectively prevents the engagement of PD-1 with its ligand PD-L1, achieving an  $IC_{50}$  of 0.70 nM. Functioning as an anti-PD-1/PD-L1 therapeutic, Camrelizumab is valuable in oncology research and treatment, with applications in various malignancies such as non-small cell lung cancer (NSCLC), esophageal squamous cell carcinoma (ESCC), Hodgkin's lymphoma, and advanced hepatocellular carcinoma (HCC), among others<sup>[1][2]</sup>.

Camrelizumab induced T-cell proliferation at an  $EC_{50}$  of 0.11 nM in peripheral blood mononuclear cells treated with tuberculin, and it induced the production of IFN-gamma at an  $EC_{50}$  of 0.38 nM in a similar assay measuring IFN-gamma secretion<sup>[2]</sup>.

Camrelizumab (dosed at 3 mg/kg) and apatinib (dosed at 200 mg/kg and 100 mg/kg) exhibited tumor growth inhibition rates of 63.1% and 87.3%, respectively, in human PD-1 transgenic mice. Camrelizumab blocked the binding of PD-1 to its ligand PD-L1, which relieved the immune suppression in the tumor microenvironment, enhanced the activity

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

---

## Product Data Sheet

---

of T cells, and thus improved the immune response against tumors<sup>[1]</sup>.

### References:

[1] Kuimin Mei, et al. Camrelizumab in combination with apatinib in second-line or above therapy for advanced primary liver cancer: cohort A report in a multicenter phase Ib/II trial. *J Immunother Cancer*. 2021 Mar;9(3):e002191.

[2] Jason D Lickliter, et al. A First-in-Human Dose Finding Study of Camrelizumab in Patients with Advanced or Metastatic Cancer in Australia. *Drug Des Devel Ther*. 2020 Mar 18;14:1177-1189.

**Caution: Product has not been fully validated for medical applications. For research use only.**

**Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com**

**Address: 10292 Central Ave. #205, Montclair, CA, USA**