Simlukafusp Alfa ELISA Kit

Summary

Catalog No.	KDG32202
Alternative Names	FAP-IL2v, RO6874281/RG7461
Stability and Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 10% prior to the expiration date under appropriate storage condition.
Detection method	Colorimetric
Sample type	Plasma, Serum
Assay type	Quantitative
Sensitivity	0.156 μg/ml
Range	0.31-5 μg/mL
Recovery	80-120%
Shipping	2-8 ℃
Note	For Research Use Only.

Background

Simlukafusp alfa (FAP-IL2v, RO6874281/RG7461) is an immunocytokine comprising an antibody against fibroblast activation protein α (FAP) and an IL-2 variant with a retained affinity for IL-2Rβγ > IL-2 Rβγ and abolished binding to IL-2 Rα. Here, we investigated the immunostimulatory properties of FAP-IL2v and its combination with programmed cell death protein 1 (PD-1) checkpoint inhibition, CD40 agonism, T cell bispecific and antibody-dependent cellular cytotoxicity (ADCC)-mediating antibodies. The binding and immunostimulatory properties of FAP-IL2v were investigated in vitro and compared with FAP-IL2wt.

Tumor targeting was investigated in tumor-bearing mice and in a rhesus monkey. The ability of FAP-IL2v to potentiate the efficacy of different immunotherapies was investigated in different xenograft and syngeneic murine tumor models. FAP-IL2v bound IL-2 Rβγ and FAP with high affinity in vitro, inducing dose-dependent proliferation of natural killer (NK) cells and CD4+/CD8+ T cells while being significantly less potent than FAP-IL2wt in activating immunosuppressive regulatory T cells (Tregs). T cells activated by FAP-IL2v were less sensitive to Fas-mediated apoptosis than those activated by FAP-IL2wt. Imaging studies demonstrated improved tumor targeting of FAP-IL2v compared to FAP-IL2wt. Furthermore, FAP-IL2v significantly enhanced the in vitro and in vivo activity of therapeutic antibodies that mediate antibody-dependent or T cell-dependent cellular cytotoxicity (TDCC) and of programmed death-ligand 1 (PD-L1) checkpoint inhibition. The triple combination of FAP-IL2v with an anti-PD-L1 antibody and an agonistic CD40 antibody was most efficacious. These data indicate that FAP-IL2v is a potent immunocytokine that potentiates the efficacy of different T- and NK-cell-based cancer immunotherapies.

Precision

CV<20%

Data Image