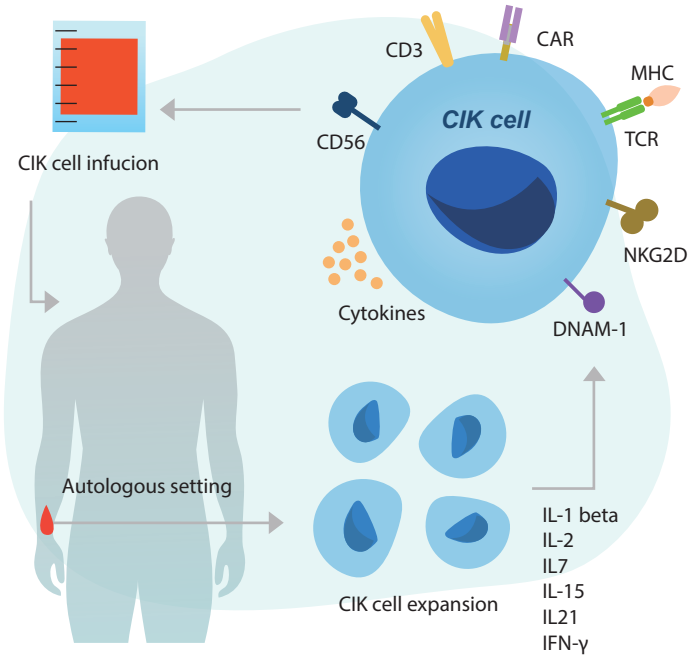
GMP-grade Recombinant Proteins Empowering Cytokine-Induced Killer (CIK) therapy

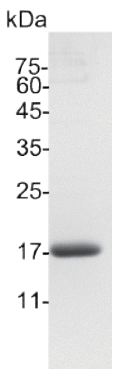
CROYEZ

Support cell cultivation, expansion, and differentiatio

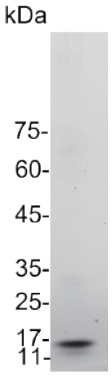
Cytokine-Induced Killer (CIK) therapy is an adoptive immunotherapy that merges T-cell potency with NK-like broad targeting. CIK cells ($CD3^+CD56^+$) eliminate tumors via both MHC-restricted and NKG2D-mediated, MHC-unrestricted pathways, showing efficacy across solid and hematologic cancers. Clinically, they are safe, with low graft-versus-host risk, and can be infused in outpatient settings. Manufacturing is rapid and scalable, expanding PBMCs within 2-3 weeks under GMP, with cells remaining stable after cryopreservation. CIK therapy is also combination-ready, enhancing outcomes with surgery, chemotherapy, targeted agents, and checkpoint inhibitors, with growing clinical evidence—especially in hepatocellular carcinoma—indicating reduced recurrence after treatment.



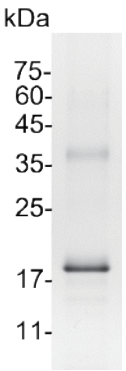
GMP ® IL-1 beta



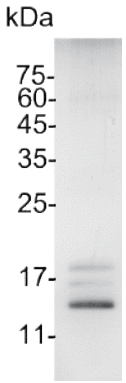
GMP ® IL-2



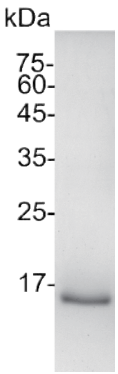
GMP ® IL-7



GMP ® IL-15



GMP ® IL-21



GMP ® IFN gamma

- Suggested GMP Proteins by Cell Type

T Cell	DC	CIK	DC-CIK	NK Cell	Neuron	iPSC / PSC
IL-1 beta	IL-1 beta	IL-1 beta	IL-1 beta	IL-2	FGF	IL-3
IL-2	IL-4	IL-2		IL-15	Noggin	IL-6
IL-4	IL-6	IL7		IL-18	EGF	FGF-2
IL-7	IL-10	IL-15		IL-21		Activin A
IL-15	TNF alpha	IL21		TGF beta 1		TGF beta 1
IL-18	IFN gamma	IFN gamma				Noggin
IL-21	GM-CSF					Flt-3L
TGF beta 1						EGF
4-1BBL						SCF
IFN gamma						TPO