

# Development of lead immunotherapy agent for cancer using IL-36 receptor agonist antibody

DGIST



ONCOLOGY	Hit
Product Type	Agonist full IgG antibody
Indication	ICB refractory melanoma
Target	Interleukin 36 receptor
MoA(Mechanism of Action)	Degradation of amplified, overexpressed and skipped mutation of MET
Competitiveness	<ul style="list-style-type: none"> <li>• Induction of IL-36 receptor-mediated signaling by inducing proximity to the IL-36 receptor subunit</li> <li>• Induction of maturation and activation of dendritic cells</li> <li>• Induction of differentiation of naïve T cells into tumor-specific T cells and</li> <li>• induce production and secretion of IFN-γ</li> <li>• NK cell activation and induction of IFN-γ production and secretion</li> <li>• Reduction of immunosuppressive cells within the tumor</li> </ul>
Development Stage	<ul style="list-style-type: none"> <li>• Currently, there is no known treatment using IL-36 (including this IL-36 receptor agonist antibody, long-acting recombinant protein, etc.), so there is a high possibility of success in technology transfer and new drug development as a first-in-class treatment.</li> <li>• IL-36 receptor agonist antibody can have a longer half-life in the body compared to the cytokine form.</li> <li>• Compared to other technologies that can increase half-life (ex, Fc-fusion protein, PEGylation, etc.), agonist antibodies have a low possibility of causing immunogenicity, making it possible to develop IL-36-based therapeutics that combine both stability and safety.</li> </ul>
Route of Administration	Hit