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# Development of a novel HPK1/MLK3 dual inhibitor, an immuno-oncology agent for MLK3-specific solid tumors

**MD Biolab Co.,Ltd**

MD Biolab Corp.

**ONCOLOGY** | **Lead**

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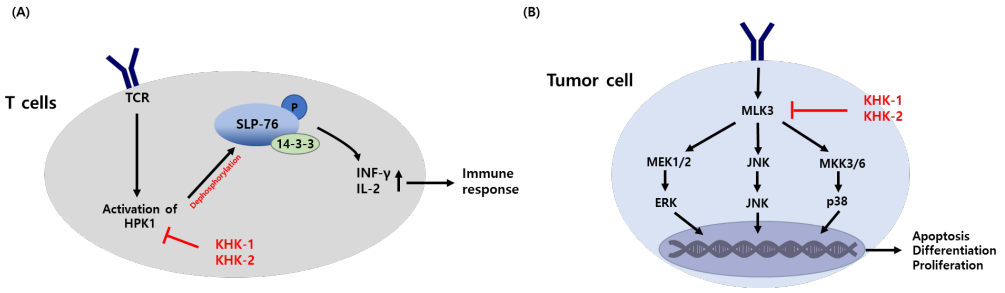
|---|---|
| Product Type | Immuno-oncology drugs |
| Indication | Solid Tumors (renal cell carcinoma, gastric cancer, liver cancer etc.) |
| Target | HPK1/MLK3 |
| MoA(Mechanism of Action) |  <br>The regulatory effect of HPK1 in T cell and role of MLK3 in cancers. (A) KHK-1 and KHK-2 block the phosphorylation of downstream SLP-76 by inhibiting the activity of HPK1. Thus, increased T cell proliferation and immune response result in increased production of IFN-γ and IL-2. (B) KHK-1 and KHK-2 suppress the proliferation and differentiation of tumor cells and increase the apoptosis via phosphorylation of ERK, JNK, p38. |
| Competitiveness | • Discovery of the new oral small-molecular Immune-oncology agent.<br>- Improved patient compliance through oral administration<br>- Combination therapy with current immune checkpoint inhibitors for effective cancer treatment<br>- Good physicochemical and pharmacokinetic profiles<br>• Discovery of the HPK1/MLK3 dual inhibitor<br>- Showing a robust anti-tumor immunity(HPK-1) and inhibitory effects on tumor cell proliferation(MLK-3) by dual targeting |
| Development Stage | Lead |
| Route of Administration | Oral Administration |

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