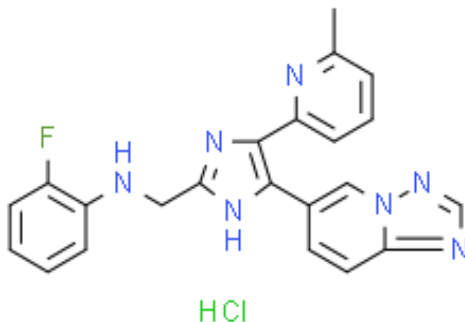


## Product Data Sheet

Cas No.:	1352610-25-3	Cat. No:	PL11856
Product Name:	Vactosertib Hydrochloride		
Product synonym:	VACTOSERTIB HYDROCHLORIDE;化合物 T15262		
Chemical name:	Vactosertib Hydrochloride		
MF:	C22H19CLFN7	FW:	435.884565591812
Purity:	≥99%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	C(C1=NC(C2=CC=CC(C)=N2)=C(C2C=CC3=NC=NN3C=2)N1)NC1C=CC=CC=1F.Cl		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

## Product Description

Vactosertib Hydrochloride (EW-7197 Hydrochloride) 是一种有效的，具有口服活性且具有 ATP 竞争性激活素受体样激酶 5 (ALK5) 抑制剂，IC<sub>50</sub> 为 12.9 nM。Vactosertib Hydrochloride 还以纳摩尔浓度抑制 ALK2 和 ALK4 (IC<sub>50</sub> 为 17.3 nM)。Vactosertib Hydrochloride 具有强大的抗转移活性和抗癌作用。

生物活性	Vactosertib Hydrochloride (EW-7197 Hydrochloride) is a potent, orally active and ATP-competitive activin receptor-like kinase 5 (ALK5) inhibitor with an IC <sub>50</sub> of 12.9 nM. Vactosertib Hydrochloride also inhibits ALK2 and ALK4 (IC <sub>50</sub> of 17.3 nM) at nanomolar concentrations. Vactosertib Hydrochloride has potently antimetastatic activity and anticancer effect.
IC <sub>50</sub> & Target[1][2]	ALK5 12.9 nM (IC <sub>50</sub> )

体外研究(In Vitro)	<p>Vactosertib (10-1000 nM; 30 minutes; 4T1 cells) treatment blocks the TGFβ-induced phosphorylation of Smad2 or Smad3 in a dose-dependent manner in 4T1 cells.</p> <p>Vactosertib suppresses the TGFβ-induced nuclear translocation of Smad2/3 in 4T1 cells and MCF10A cells. The IC50 value of Vactosertib on pSmad3 in 4T1 cells is 10-30 nM.</p> <p>Vactosertib abrogates TGFβ1-induced tumor cell migration and invasion.</p> <p>TGFβ1 downregulated the mRNA level of CDH1 and upregulated the mRNA levels of FN1, HMGA2 (high-mobility group AT-hook 2), SNAI1, and SNAI2 (Snail family zinc finger 1 and 2, respectively). Moreover, Vactosertib abolishes the TGFβ1-induced effects on genes related to epithelial-to-mesenchymal transition (EMT). has not independently confirmed the accuracy of these methods. They are for reference only.</p>
体内研究(In Vivo)	<p>Vactosertib (40 mg/kg; intraperitoneal injection; every other day; for 10 weeks; MMTV/c-Neu female mice) treatment inhibits Smad/TGFβ signaling, cell migration, invasion, and lung metastasis in MMTV/c-Neu mice.</p> <p>Vactosertib also inhibits the epithelial-to-mesenchymal transition (EMT) in both TGFβ-treated breast cancer cells and 4T1 orthotopic-grafted mice. Furthermore, Vactosertib enhances cytotoxic T lymphocyte activity in 4T1 orthotopic-grafted mice and increased the survival time of 4T1-Luc and 4T1 breast tumor-bearing mice. has not independently confirmed the accuracy of these methods. They are for reference only.</p>
包装储存	-20°C, stored under nitrogen In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)
溶解度数据	In Vitro: H <sub>2</sub> O : 50 mg/mL (114.71 mM; Need ultrasonic)DMSO : 50 mg/mL (114.71 mM; Need ultrasonic)配制储备液