

# BMS-5

## Inhibitor of LIMK1 and LIMK2

BMS-5 is a potent inhibitor of the LIM kinase. It has  $IC_{50}$  values of 7nM and 8 nM for LIMK1 and LIMK2 respectively. LIMK1/2 activity was measured via TCA precipitation assay using a biotinylated ADF (actin depolymerization factor) as the protein substrate and the kinase domains of LIMK1 and LIMK2 as the enzyme sources in the presence of 1  $\mu$ M ATP.

Kinases, such as LIM kinase 1 (LMK1) and LIM kinase 2 (LMK2), have been identified as participating in signal pathways affecting actin dynamics by deactivating cofilin. Over expression of LIMK1 has been found in invasive breast and prostate cancer cell lines and suppression of LIMK 2 expression has been found to limit migration of human fibrosarcoma cells. Thus, the inhibition of LIMK1 and/or LIMK2 enzymes have been suggested as targets for treating cancer, including reduction or prevention of metastasis.

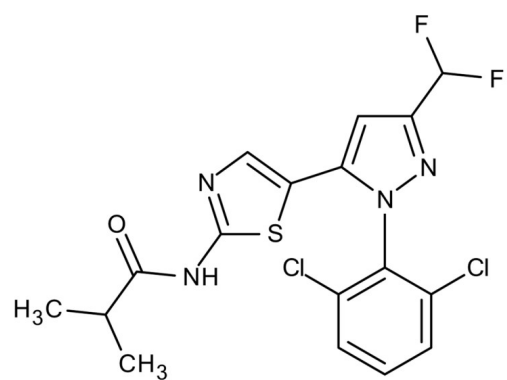
### Ordering Information

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ENZ-CHM178-0001	1mg
ENZ-CHM178-0005	5mg

### Manuals, SDS & CofA

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## Handling & Storage

Use/Stability	As indicated on product label or CoA when stored as recommended.
Short Term Storage	+4°C
Long Term Storage	-20°C
Shipping	Ambient Temperature

## Regulatory Status

RUO - Research Use Only

## Product Details

Alternative Name	LIMKi 3, N-[5-[1-(2,6-Dichlorophenyl)-3-(difluoromethyl)-1H-pyrazol-5-yl]-2-thiazolyl]-2-methylpropanamide
Appearance	White powder.
CAS	1338247-35-0
Couple Target	LIMK
Couple Type	Inhibitor
Formula	$C_{17}H_{14}Cl_2F_2N_4OS$
Identity	Determined by EM-MS, NMR
MW	431.3
Purity	≥98% (HPLC)
Solubility	Soluble in DMSO (15mM).

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