# **Product data sheet**



MedKoo Cat#: 561225			
Name: BIBX 1382 Dihydrochloride			
CAS#: 1216920-18-1		HN CI H-CI	
Chemical Formula: C <sub>18</sub> H <sub>21</sub> Cl <sub>3</sub> FN <sub>7</sub>			
Molecular Weight: 460.76			
Product supplied as:	Powder	N H-CI	
Purity (by HPLC):	≥ 98%		
Shipping conditions	Ambient temperature		
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.		
	In solvent: -80°C 3 months; -20°C 2 weeks.		

### 1. Product description:

BIBX 1382 dihydrochloride blocks Lassa, Ebola and Marburg viruses. BIBX 1382 dihydrochloride blocked both Lassa and Ebola virus glycoprotein-dependent cell entry. This compound may be used as a tool to understand conserved virus-host interactions, and implicate host cell kinases that may be targets for broad spectrum therapeutic intervention.

## 2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	19.39	42.08
Water	19.39	42.08

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.17 mL	10.85 mL	21.70 mL
5 mM	0.43 mL	2.17 mL	4.34 mL
10 mM	0.22 mL	1.09 mL	2.17 mL
50 mM	0.04 mL	0.22 mL	0.43 mL

## 5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of "Calculator"

# 6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

1. Jung KH, Lee EJ, Park JW, Lee JH, Moon SH, Cho YS, Lee KH. EGF receptor stimulation shifts breast cancer cell glucose metabolism toward glycolytic flux through PI3 kinase signaling. PLoS One. 2019 Sep 18;14(9):e0221294. doi: 10.1371/journal.pone.0221294. PMID: 31532771; PMCID: PMC6750601.

### In vivo study

1. Kim S, Graham MJ, Lee RG, Yang L, Kim S, Subramanian V, Layne JD, Cai L, Temel RE, Shih D, Lusis AJ, Berliner JA, Lee S. Heparin-binding EGF-like growth factor (HB-EGF) antisense oligonucleotide protected against hyperlipidemia-associated atherosclerosis. Nutr Metab Cardiovasc Dis. 2019 Mar;29(3):306-315. doi: 10.1016/j.numecd.2018.12.006. Epub 2019 Jan 9. PMID: 30738642; PMCID: PMC6452438.

#### 7. Bioactivity

Biological target:

Highly selective EGFR-kinase inhibitor.

In vitro activity

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EGFR stimulation also increased T47D cell proliferation. Blocking EGFR activation with BIBX1382 or gefitinib completely abolished both FDG uptake and proliferation effects.

Reference: PLoS One. 2019 Sep 18;14(9):e0221294. https://pubmed.ncbi.nlm.nih.gov/31532771/

#### In vivo activity

The male and female LDLR deficient mice under Western diet containing 21% fat and 0.2% cholesterol content were cotreated with control and HB-EGF ASOs for 12 weeks. An EGFR blocker BIBX1382 administration suppressed the hepatic TG secretion rate, suggesting a positive role of the HB-EGF signaling for the hepatic VLDL production.

Reference: Nutr Metab Cardiovasc Dis. 2019 Mar;29(3):306-315. https://pubmed.ncbi.nlm.nih.gov/30738642/

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.