# **PRODUCT** INFORMATION



## **BLU-782**

Item No. 35490

CAS Registry No.: Formal Name:	2141955-96-4 4-[6-[5-[4-ethoxy-1-(1-methylethyl)-4- piperidinyl]-2-pyridinyl]pyrrolo[1,2-b] pyridazin-4-yl]-1-piperazinecarboxylic acid, (3R)-tetrahydro-3-furanyl ester	
Synonyms:	Activin Receptor-like Kinase 2 Inhibitor 1, ALK2-IN-1, Fidrisertib	N
MF:	$C_{31}H_{42}N_6O_4$	
FW:	562.7	
Purity:	≥95%	
UV/Vis.:	λ <sub>max</sub> : 255, 320 nm	Ň
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis		

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### Laboratory Procedures

BLU-782 is supplied as a solid. A stock solution may be made by dissolving the BLU-782 in the solvent of choice, which should be purged with an inert gas. BLU-782 is soluble in the organic solvent DMSO at a concentration of approximately 1 mg/ml.

### Description

BLU-782 is an inhibitor of activin receptor-like kinase 2 (ALK2) containing an arginine-to-histidine substitution mutation at position 206 (ALK2<sup>R206H</sup>), an activating mutation found in patients with fibrodysplasia ossificans progressiva (FOP), which is characterized by progressive heterotopic ossification, or diffuse intrinsic pontine glioma (DIPG), which is a type of pediatric brain stem cancer.<sup>1</sup> It binds to ALK2<sup>R206H</sup> (IC<sub>50</sub> =  $\leq$ 10 nM) and reduces phosphorylation of the ALK2 substrate SMAD1 at serine 463 (Ser<sup>463</sup>) and Ser<sup>465</sup> in HEK293 cells expressing ALK2<sup>R206H</sup> (IC50 =  $\leq$ 100 nM).

### Reference

1. Fleming, P.E., Hodous, B.L., Kim, J.L., et al. Inhibitors of activin receptor-like kinase. Blueprint Medicines Corporation. WO2017/181117AI (2017).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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