# **PRODUCT** INFORMATION



Axitinib-<sup>13</sup>C-d<sub>2</sub>

CAS Registry No.: Formal Name:	1261432-00-1 (E)-N-(methyl- <sup>13</sup> C-d <sub>3</sub> )-2-((3-(2-(pyridin-2-yl) vinyl)-1H-indazol-6-yl)thio)benzamide	
Synonym:	AG-013736- <sup>13</sup> C-d <sub>3</sub>	D S N
MF:	C <sub>21</sub> [ <sup>13</sup> C]H <sub>15</sub> D <sub>3</sub> N <sub>4</sub> OS	
FW:	390.5	
<b>Chemical Purity:</b>	≥95% (Axitinib)	
Deuterium		
Incorporation:	≥99% deuterated forms (d <sub>1</sub> -d <sub>3</sub> ); ≤1% d <sub>0</sub>	
Supplied as:	A solid	N
Storage:	-20°C	
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

Laboratory Procedures

Axitinib-<sup>13</sup>C-d<sub>3</sub> is intended for use as an internal standard for the quantification of axitinib (Item No. 13813) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Axitinib- $^{13}$ C-d<sub>3</sub> is supplied as a solid. A stock solution may be made by dissolving the axitinib- $^{13}$ C-d<sub>3</sub> in the solvent of choice, which should be purged with an inert gas. Axitinib- $^{13}$ C-d<sub>2</sub> is soluble in acetonitrile, methanol, and DMSO.

## Description

Axitinib (Item No. 13813) is a VEGFR inhibitor (IC<sub>50</sub>s = 1.2, 0.25, and 0.29 nM for VEGFR1, -2, and -3, respectively).<sup>1</sup> It also inhibits c-Kit and PDGFR $\beta$  (IC<sub>50</sub>s = 1.7 and 1.6 nM, respectively). It inhibits VEGF-induced migration of and tube formation by human umbilical vein endothelial cells (HUVECs).<sup>2</sup> Axitinib (1-100 mg/kg) reduces microvessel density, a marker of angiogenesis, and tumor growth in MV522 colon carcinoma, A375 melanoma, SN12C-GFP renal carcinoma, and U87 glioma mouse xenograft models in a dose-dependent manner. Formulations containing axitinib have been used in the treatment of renal cell carcinoma.

## References

- 1. Giles, F.J., Bellamy, W.T., Estrov, Z., et al. The anti-angiogenesis agent, AG-013736, has minimal activity in elderly patients with poor prognosis acute myeloid leukemia (AML) or myelodysplastic syndrome (MDS). Leuk. Res. 30(7), 801-811 (2006).
- 2. Hu-Lowe, D.D., Zou, H.Y., Grazzini, M.L., et al. Nonclinical antiangiogenesis and antitumor activities of axitinib (AG-013736), an oral, potent, and selective inhibitor of vascular endothelial growth factor receptor tyrosine kinases 1, 2, 3. Clin. Cancer Res. 14(22), 7272-7283 (2008).

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

### SAFETY DATA

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.

## WARRANTY AND LIMITATION OF REMEDY

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