

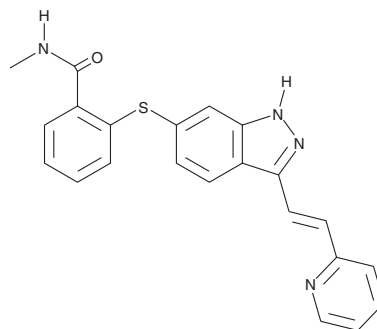
# PRODUCT INFORMATION



## Axitinib

Item No. 13813

**CAS Registry No.:** 319460-85-0  
**Formal Name:** N-methyl-2-[[3-[(1E)-2-(2-pyridinyl)ethenyl]-1H-indazol-6-yl]thio]benzamide  
**Synonym:** AG-013736  
**MF:** C<sub>22</sub>H<sub>18</sub>N<sub>4</sub>OS  
**FW:** 386.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 259, 332 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Axitinib is supplied as a crystalline solid. A stock solution may be made by dissolving the axitinib in the solvent of choice, which should be purged with an inert gas. Axitinib is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of axitinib in these solvents is approximately 2.5 and 0.25 mg/ml, respectively.

### Description

Axitinib 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 PDGFRβ (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

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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