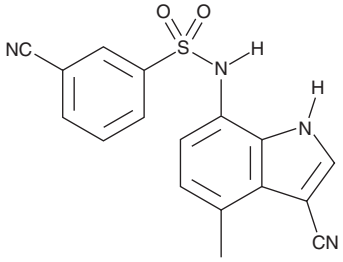
PRODUCT INFORMATION

E7820

Item No. 25502

CAS Registry No.:	289483-69-8
Formal Name:	3-cyano-N-(3-cyano-4-methyl-1H-indol-7-yl)-benzenesulfonamide
MF:	$C_{17}H_{12}N_4O_2S$
FW:	336.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 219, 284 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



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

Laboratory Procedures

E7820 is supplied as a crystalline solid. A stock solution may be made by dissolving the E7820 in the solvent of choice, which should be purged with an inert gas. E7820 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of E7820 in these solvents is approximately 20 and 30 mg/ml, respectively.

E7820 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, E7820 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. E7820 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

E7820 is a sulfonamide derivative and an angiogenesis inhibitor that inhibits bFGF- and VEGF-stimulated human umbilical vein endothelial cell (HUVEC) proliferation (IC_{50}s = 0.1 and 0.081 µg/ml, respectively).[1] It inhibits bFGF- and VEGF-stimulated tube formation of HUVECs in a concentration-dependent manner (IC_{50}s = 0.2 and 0.24 µg/ml, respectively). E7820 selectively decreases the surface expression and mRNA levels of integrin α2 over CD31 and VE-cadherin in HUVECs. *In vivo*, E7820 (200 and 400 mg/kg) reduces tumor growth and inhibits angiogenesis in a WiDr colorectal cancer mouse xenograft model. It also reduces tumor weight in a panel of seven human colon, breast, pancreas, and kidney cancer mouse xenograft models, completely inhibits tumor growth in KP-1 pancreatic and LoVo colon cancer mouse xenograft models, and inhibits tumor growth in KP-1 and COLO 320DM mouse orthotopic transplantation models.[2]

References

1. Funahashi, Y., Sugi, N.H., Semba, T., *et al.* Sulfonamide derivative, E7820, is a unique angiogenesis inhibitor suppressing an expression of integrin α2 subunit on endothelium. *Cancer Res.* **62(21)**, 6116-6123 (2002).
2. Semba, T., Funahashi, Y., Ono, N., *et al.* An angiogenesis inhibitor E7820 shows broad-spectrum tumor growth inhibition in a xenograft model: Possible value of integrin α2 on platelets as a biological marker. *Clin. Cancer Res.* **10(4)**, 1430-1438 (2004).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM