PRODUCT INFORMATION



BAY-1895344

Item No. 33603

CAS Registry No.: 1876467-74-1

Formal Name: 2-[(3R)-3-methyl-4-morpholinyl]-4-(1-

methyl-1H-pyrazol-5-yl)-8-(1H-pyrazol-3-

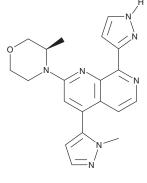
yl)-1,7-naphthyridine

Synonym: Elimusertib MF: $C_{20}H_{21}N_7O$ FW: 375.4 **Purity:** ≥98%

UV/Vis.: λ_{max} : 221, 282 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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



Laboratory Procedures

BAY-1895344 is supplied as a crystalline solid. A stock solution may be made by dissolving the BAY-1895344 in the solvent of choice, which should be purged with an inert gas. BAY-1895344 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of BAY-1895344 in ethanol is approximately 1 mg/ml and approximately 25 mg/ml in DMSO and DMF.

BAY-1895344 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BAY-1895344 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. BAY-1895344 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

BAY-1895344 is an inhibitor of ataxia-telangiectasia and Rad3-related protein/kinase (ATR; IC₅₀ = 0.007 µM).^{1,2} It is selective for ATR over DNA protein kinase (DNA-PK), ataxia-telangiectasia mutated kinase (ATM), and PI3K β (IC₅₀s = 0.332, 1.42, and 3.27 μ M, respectively).¹ BAY-1895344 inhibits proliferation of HT-29 and LoVo colorectal cancer cells and SU-DHL-8 B lymphoma cells with IC $_{50}$ values of 0.16, 0.071, and 0.009 μ M, respectively. It reduces tumor growth in a mutant ATM K1964E -containing SU-DHL-8 mouse xenograft model when administered at a dose of 50 mg/kg. BAY-1895344 is synergistic with carboplatin (Item No. 13112), olaparib (Item No. 10621), or radiation in various mouse xenograft models.^{1,2}

References

- 1. Lücking, U., Wortmann, L., Wengner, A.M., et al. Damage incorporated: Discovery of the potent, highly selective, orally available ATR inhibitor BAY 1895344 with favorable pharmacokinetic properties and promising efficacy in monotherapy and in combination treatments in preclinical tumor models. J. Med. Chem. 63(13), 7293-7325 (2020).
- 2. Wengner, A.M., Siemeister, G., Lücking, U., et al. The novel ATR inhibitor BAY 1895344 is efficacious as monotherapy and combined with DNA damage-inducing or repair-compromising therapies in preclinical cancer models. Mol. Cancer Ther. 19(1), 26-38 (2020).

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

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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