

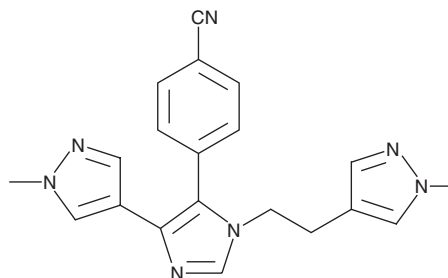
PRODUCT INFORMATION



BAZ2-ICR

Item No. 17448

CAS Registry No.: 1665195-94-7
Formal Name: 4-[4-(1-methyl-1H-pyrazol-4-yl)-1-[2-(1-methyl-1H-pyrazol-4-yl)ethyl]-1H-imidazol-5-yl]-benzonitrile
MF: C₂₀H₁₉N₇
FW: 357.4
Purity: ≥98%
UV/Vis.: λ_{max}: 230, 320 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

BAZ2-ICR is supplied as a crystalline solid. A stock solution may be made by dissolving the BAZ2-ICR in the solvent of choice, which should be purged with an inert gas. BAZ2-ICR is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of BAZ2-ICR in ethanol and DMSO is approximately 10 mg/ml and approximately 20 mg/ml in DMF.

BAZ2-ICR is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BAZ2-ICR should first be dissolved in DMF and then diluted with the aqueous buffer of choice. BAZ2-ICR has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

BAZ2A/B are bromodomain-containing proteins whose biological function, while not yet confirmed, is believed to function similarly to ACF1, the *Drosophila* BAZ2B ortholog. ACF complexes play roles in establishing regular nucleosome spacing during chromatin assembly and influencing different remodeling outcomes at target loci.^{1,2} A rare allele of BAZ2B has been identified to be a predictor of Sudden Cardiac Death.³ BAZ2-ICR is a small molecule inhibitor of BAZ2A (K_D = 109 nM; IC₅₀ = 130 nM) and BAZ2B (K_D = 170 nM; IC₅₀ = 180 nM) bromodomains.⁴ It demonstrates 15-fold selectivity for binding BAZ2A/B over CECR2 and >100-fold selectivity over all other bromodomains.⁴ BAZ2-ICR has been shown to displace BAZ2 bromodomains in living cells by demonstrating accelerated FRAP recovery at 1 μM in the BAZ2A FRAP assay.⁴ See the Structural Genomics Consortium (SGC) website for more information.

References

1. Clapier, C.R. and Cairns, B.R. The biology of chromatin remodeling complexes. *Annu. Rev. Biochem.* **78**, 273-304 (2009).
2. He, X., Fan, H.-Y., Garlick, J.D., et al. Diverse regulation of SNF2h chromatin remodeling by noncatalytic subunits. *Biochemistry* **47**, 7025-7033 (2008).
3. Arking, D.E., Juntila, M.J., Goyette, P., et al. Identification of a sudden cardiac death susceptibility locus at 2q24.2 through genome-wide association in European ancestry individuals. *PLoS Genet.* **7(6)**, 1-9 (2011).
4. Drouin, L., McGrath, S., Vidler, L.R., et al. Structure enabled design of BAZ2-ICR, a chemical probe targeting the bromodomains of BAZ2A and BAZ2B. *J. Med. Chem.* **58(5)**, 2553-2559 (2015).

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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