ABBV-075
Item No. 21033

CAS Registry No.: 1445993-26-9
Formal Name: N-[4-(2,4-difluorophenoxy)-3-(6,7-dihydro-6-methyl-7-oxo-1H-pyrrolo[2,3-c]pyridin-4-yl)phenyl]-ethanesulfonamide

Synonyms: Mivebresib
MF: C_{22}H_{19}F_{2}N_{3}O_{4}S
FW: 459.5
Purity: ≥98%
UV/Vis.: \lambda_{\text{max}}: 229, 297 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

ABBV-075 is supplied as a crystalline solid. A stock solution may be made by dissolving the ABBV-075 in the solvent of choice. ABBV-075 is soluble in organic solvents such as DMSO and acetonitrile, which should be purged with an inert gas. The solubility of ABBV-075 in these solvents is approximately 20 and 1 mg/ml, respectively.

Description

ABBV-075 is a potent inhibitor of the bromodomain and extra terminal domain (BET) family of proteins that is selective for the bromodomain-containing proteins (BRD) BRD2, BRD4, and BRDT (K_{i} = 1-2.2 nM) over BRD3 (K_{i} = 12.2 nM) and against a panel of 18 BRD proteins.\(^1\) It inhibits BRD4 recruitment to androgen receptor-occupied gene enhancer sites leading to growth inhibition in androgen receptor-dependent prostate cancer cells.\(^2\) ABBV-075 halts the cell cycle in the G\(_1\) phase and induces apoptosis in prostate cancer cells as well as patient-derived acute myeloid leukemia (AML), non-Hodgkin lymphoma, and multiple myeloma cells.\(^3\) It is also efficacious in many xenograft mouse models including lung and prostate cancers, AML, and multiple myeloma.\(^1-3\) Formulations containing ABBV-075 are in clinical trials for the treatment of advanced hematologic malignancies and solid tumors.

References
