

Cat No. 14-Z32

PD173074

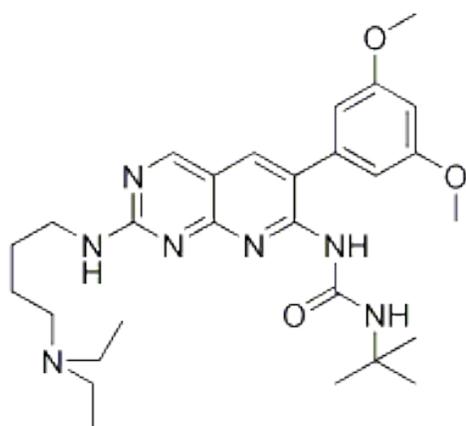
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PD173074 is a potent, cell permeable and ATP competitive inhibitor of FGFR and VEGFR. It has been shown to arrest the G0/G1 phase of FGFR3– expressing cells. PD173074 blocks the FGFR signaling pathway and leads to self-renewal of stem cells via ERK1/2 activation. Treatment of FGF2-expressing human multipotent adipose-derived stem cells with PD173074 has been shown to dramatically decrease their differentiation potential and clonogenicity.



For research purposes only

TECHNICAL INFORMATION



Other Names: N-[2-[[4-(Diethylamino)butyl]amino]-6-(3,5-dimethoxyphenyl)pyrido[2,3-d]pyrimidin-7-yl]-N'-(1,1-dimethylethyl)urea

Chemical Formula: C₂₈H₄₁N₇O₃

CAS Number: 219580-11-7

Molecular Weight: 523.67

Purity: >98%

Appearance: Crystalline solid

Solubility: DMSO

STORAGE AND HANDLING

Storage: Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

Stability: Stock solutions stable at -20°C for up to 2 years.

Shipping Conditions: Shipped at room temperature.

PRODUCT USE

Soluble in DMSO at 100 mM. For a 10mM concentrated stock solution, reconstitute the compound by adding 382µl of DMSO to the entire contents of the vial. If precipitate is observed, vortex for 5 minutes. For most cells the maximum tolerance to DMSO is <0.5%.

REFERENCES

1. Mohammadi et al. (1998) Crystal structure of an angiogenesis inhibitor bound to the FGF receptor kinase domain. *EMBO J.* 17(20):5896-904.
2. Chan et al. (2010) Fibroblast growth factor-10 promotes cardiomyocyte differentiation from embryonic and induced pluripotent stem cells. *PLoS One.* 5(12):e14414.
3. Pardo et al. (2009) The fibroblast growth factor receptor inhibitor PD173074 blocks small cell lung cancer growth in vitro and in vivo. *Cancer Res.* 69(22):8645-51.
4. Zaragosi et al. (2006) Autocrine fibroblast growth factor 2 signaling is critical for self-renewal of human multipotent adipose-derived stem cells. *Stem Cells.* 24(11):2412-9.