

Catalog # 10-1395 LYS6K2

1082949-67-4

4-(4-(4-(4-(4-fluoro-3-(trifluoromethyl)phenyl)-1-methyl-1H-imidazol-2-yl)piperidin-1-yl)-1H-pyrazolo[3,4-d]pyrimidine Lot # X104190

A selective inhibitor of the p70 ribosomal S6 kinase (S6K)1. Blocks the phosphorylation of S6 at concentrations as low as 0.1-0.3 μ M with no activity at GSK3 β and Erk1/2 at 10 μ M2. Useful tool to dissect insulin receptor signaling pathways and was employed to show that the action of mTORC1 on SREB P-1c expression is not mediated by S6K2. Cell permeable.

- 1) Fenton et al. (2011), Functions and regulation of the 70kDa ribosomal S6 kinases; Int. J. Biochem. Cell Biol., 43 47
- 2) Li et al. (2010), Bifurcation of insulin signaling pathway in the rat liver: mTORC1 required for stimulation of lipogenesis, but no inhibition of gluconeogenesis; Proc. Natl. Acad. Sci. USA, **107** 3441

PHYSICAL DATA

Molecular Weight: 445.42 Molecular Formula: $C_{21}H_{19}F_4N_7$ Purity: 97% by HPLC

NMR: (Conforms)

Solubility: DMSO (up to 1 mg/ml) or DMF (up to 3 mg/ml with warming)

Physical Description: Yellow solid

Storage and Stability: Store as supplied desiccated at room temperature for up to 3 years from the date of purchase.

Solutions in DMSO or DMF may be stored at -20°C for up to 3 months.

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