

<b>Product Name</b>	: BMS-509744
<b>Synonyms</b>	: PD 0332991
<b>Cat No.</b>	: M21885
<b>CAS Number</b>	: 439575-02-7
<b>Molecular Formula</b>	: C <sub>24</sub> H <sub>29</sub> N <sub>7</sub> O <sub>2</sub>
<b>Formula Weight</b>	: 447.53
<b>Chemical Name</b>	: —
<b>Description</b>	: BMS-509744 reduces T-cell receptor-induced functions including PLCγ1 tyrosine phosphorylation, calcium mobilization, IL-2 secretion, and T-cell proliferation in vitro in both human and mouse cells. BMS-488516 and BMS-509744 potently inhibit Itk in vitro with IC <sub>50</sub> values of 96 and 19 nM, respectively. Both compounds exhibit competitive kinetics with respect to ATP, suggesting that they bind to the ATP binding site of the Itk kinase domain.
<b>Pathway</b>	: Angiogenesis
<b>Target</b>	: CDK
<b>Receptor</b>	: MAPK/DYRK1A
<b>Solubility</b>	: DMSO : 5 mg/mL (11.17 mM; ultrasonic and adjust pH to 3 with HCl); H <sub>2</sub> O : 0.1 mg/mL (0.22 mM; Need ultrasonic)
<b>SMILES</b>	: <chem>O=C1C(C(C)=O)=C(C2=CN=C(N=C2N1C3CCCC3)NC4=CC=C(N5CCNCC5)C=N4)C</chem>
<b>Storage</b>	: (-20°C)
<b>Stability</b>	: ≥ 2 years
<b>Reference</b>	:

1. Fry DW, et al. Specific inhibition of cyclin-dependent kinase 4/6 by PD 0332991 and associated antitumor activity in human tumor xenografts. *Mol Cancer Ther.* 2004 Nov;3(11):1427-38. 2. Katsumi Y, et al. Sensitivity of malignant rhabdoid tumor cell lines to PD 0332991 is inversely correlated with p16 expression. *Biochem Biophys Res Commun*, 2011, 413(1), 62-68. 3. Goel S, et al. CDK4/6 inhibition triggers anti-tumour immunity. *Nature*. 2017 Aug 24;548(7668):471-475.