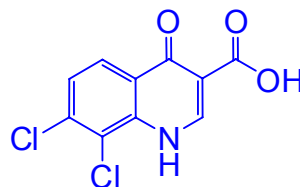


HUMAN PROTEIN KINASE CK2 INHIBITORS DEVELOPED BY OTAVA SCIENTISTS

NEW!

7,8-Dichloro-1,4-dihydro-4-oxo-3-quinolinecarboxylic acid - a new CK2 inhibitor from OTAVA with $IC_{50} = 0.8 \mu M$



Chemical Formula: $C_{10}H_5Cl_2NO_3$
Molecular Weight: 258.06

OTAVA catolg no.	CAS RN	Amount	Delivery time	Purity
0107830107	300675-28-9	5 mg 25 mg 1 gram	In-stock In-stock In-stock	$\geq 95\%$ by CHN analysis & 1H NMR

Ref.: Golub et al. **Evaluation of 3-Carboxy-4(1H)-quinolones as Inhibitors of Human Protein Kinase CK2.** *Journal of Medicinal Chemistry* (2006), 49, 6443-6450
A new class of CK2 inhibitors, **3-carboxy-4(1H)-quinolones**, has been selected via receptor-based virtual screening of the **OTAVA** compound library. It was revealed that the most active compounds, 5,6,8-trichloro-4-oxo-1,4-dihydroquinoline-3-carboxylic acid ($IC_{50} = 0.3 \mu M$) and 4-oxo-1,4-dihydrobenzo[h]quinoline-3-carboxylic acid ($IC_{50} = 1 \mu M$), are ATP competitive (K_i values are 0.06 and 0.28 μM , resp.). Evaluation of the inhibitors on seven protein kinases shows considerable selectivity toward CK2. *According to theoretical calculations and experimental data, a structural model describing the key features of 3-carboxy-4(1H)-quinolones responsible for tight binding to CK2 active site has been developed.*