

# Bay 65-1942 (hydrochloride)

Catalog No: tcsc0623



## Available Sizes

**Size:** 2mg

**Size:** 5mg

**Size:** 10mg



## Specifications

**CAS No:**

600734-06-3

**Formula:**

$C_{22}H_{26}ClN_3O_4$

**Pathway:**

NF-κB

**Target:**

IKK

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Observed Molecular Weight:**

431.91

## Product Description

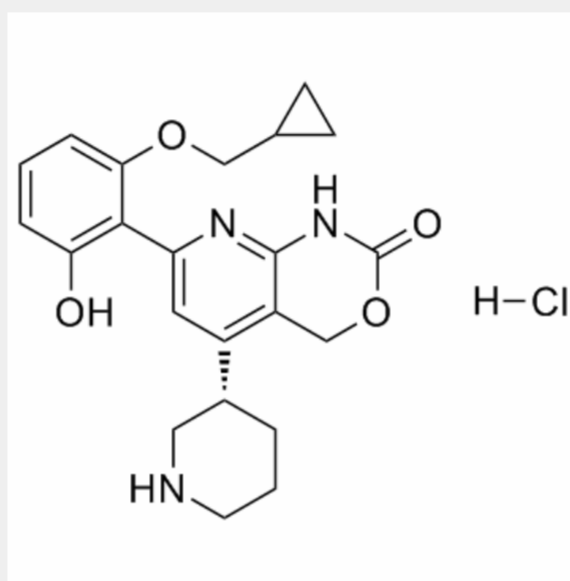
Bay 65-1942 hydrochloride is an ATP-competitive and selective **IKKβ** inhibitor.

IC50 & Target: IKKβ<sup>[1]</sup>

**In Vitro:**

Delivery of Bay 65-1942 prior to ischemia significantly decreases left ventricular infarct size compared with animals receiving vehicle. Compared with sham animals, animals receiving vehicle have a significant increase in the infarct-to-area at risk (AAR) ratio ( $70.7 \pm 3.4$  vs.  $5.8 \pm 3.4\%$ , P[1].

**In Vivo:** Inhibitors of MEK (AZD6244) and IKK (BAY 65-1942) are used at their  $IC_{50}$  concentrations, as determined by a 48 hour MTS assay, which achieve sufficient inhibition of kinase activity. MYL-R cells are treated for 24 hours with AZD6244 (5  $\mu$ M), BAY 65-1942 (10  $\mu$ M), or a combination of these inhibitors at the same concentrations. AZD6244 and BAY 65-1942 demonstrate synergistic inhibition of cell viability at the dose combination (5  $\mu$ M AZD6244+10  $\mu$ M BAY 65-1942), which correlates with  $IC_{75}$  (CI =  $0.48 \pm 0.01$ ). Synergism is also indicated at the  $IC_{50}$  (CI =  $0.56 \pm 0.09$ ) and  $IC_{90}$  (CI =  $0.46 \pm 0.02$ ) dose combinations reported by the software (CI values are the mean of three independent experiments,  $\pm$  standard deviation). AZD6244 and BAY 65-1942 treatment induces 2- and 1.3-fold caspase 3/7 activation, respectively, compared to the DMSO-treated cells. Treatment with a combination of AZD6244 plus BAY 65-1942 leads to a 3.2-fold increase in caspase 3/7 activity<sup>[2]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!