Product Specification Sheet

AS-605240 **Product Name:**

Catalog Number: C2760

Technical information:

 $C_{12}H_7N_3O_2S$ Chemical Formula:

> CAS #: 648450-29-7

Molecular Weight: 257.27

Purity: > 98%

Appearance: Grey solid

Solubility: Soluble in DMSO up to 5 mM

Chemical Name: (Z)-5-(quinoxalin-6-ylmethylene)thiazolidine-2,4-dione

> Store solid powder at 4°C desiccated; Store DMSO solution at -20°C. Storage:

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months

under proper storage condition.

Handling: • To make 10 mM stock solution, add 0.389mL of DMSO for each mg of AS-605240

• For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum

sample recovery.

Biological Activity:

AS-605420 is an orally-available, ATP competitive inihbitor of the thiazolinedione class with IC50 potency against PI3Kg of 8 nM. It also has peripheral activity versus other PI3K isoforms of 60 nM, 270 nM, and 300 nM for alpha, beta, and delta, respectively.

AS-605240

AS-605240 has been shown to selectively block class IB PI3K signaling in cultured macrophages. Dose-dependent treatment resulted in lowered blood glucose levels with improvement in insulin sensitivity and glucose tolerance without adverse effect on body weight. [1]

AS-605240 has also been utilized in the exploration for experimental autoimmune encephalomyelitis (EAE). AS605420-treated mice fully recovered from EAE and experienced significantly reduced clinical and cumulative disease scores. Histological CNS analysis revealed that AS605240 treated mice had reduced cellular pathology in the spinal cord and reduced signs of demyelination. [2]

Reference: 1. Kobayashi et al., Blockade of class IB phosphoinositide-3 kinase ameliorates obesity-induced inflammation and insulin resistance. Proc. Natl. Acad. Sci. 2011, 108(14), 5753-5758. Pubmed ID: 21436039

> 2. Comerford et al., PI3Ky drives priming and survival of autoreactive CD4(+) T cells during experimental autoimmune encephalomyelitis. PLoSONE, 2012, 7(9), e45095 Pubmed ID: 23028778

To reorder: http://www.cellagentech.com/AS-605240/

For Technical Support: technical@cellagentech.com

Chemicals are sold for research use only, not for clinical or diagnostic use.