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**Product Data Sheet**

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Product Name: AZD-5672

Cat. No.: GC64274

**Chemical Properties**

Cas. No. 780750-65-4

Formula C<sub>32</sub>H<sub>38</sub>F<sub>2</sub>N<sub>2</sub>O<sub>5</sub>S<sub>2</sub>

M.Wt 632.78

Solubility DMSO : 33.33 mg/mL (52.67 mM; ultrasonic and warming and heat to 60°C) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

AZD-5672 is an orally active, potent, and selective CCR5 antagonist (IC<sub>50</sub>=0.32 nM). AZD-5672 shows moderate activity against the hERG ion channel (binding IC<sub>50</sub>=7.3 μM). AZD5672 is a substrate of human P-gp, and inhibits P-gp-mediated digoxin transport (IC<sub>50</sub>=32 μM). AZD-5672 can be used for the research of rheumatoid arthritis[1][2][3].

AZD-5672 (0, 0.1, 0.3, 1, 3, 10, 30, and 100 μM) inhibits P-gp-mediated digoxin transport in a concentration-dependent manner (mean apparent IC<sub>50</sub>: 32 μM) in Caco-2 cells[2].

In vivo pharmacokinetics data for AZD-5672 (compound 1)[1] Species Cl<sub>a</sub>(mL/min/kg) V<sub>ss</sub>(L/kg) t<sub>1/2a</sub>(h) F<sub>b</sub>(%) Rat 28 5.3 2.6 38 Dog 18 5.7 3.9 86 a AZD-5672 dosed 1-2 mg/kg i.v. b AZD-5672 dosed 2-5 mg/kg p.o.

[1]. Cumming JG, et al. Balancing hERG affinity and absorption in the discovery of AZD5672, an orally active CCR5 antagonist for the treatment of rheumatoid arthritis. *Bioorg Med Chem Lett*. 2012 Feb 15;22(4):1655-9.

[2]. Elsbey R, et al. The utility of in vitro data in making accurate predictions of human P-glycoprotein-mediated drug-drug interactions: a case study for AZD5672. *Drug Metab Dispos*. 2011 Feb;39(2):275-82.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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[3]. Gerlag DM, et al. Preclinical and clinical investigation of a CCR5 antagonist, AZD5672, in patients with rheumatoid arthritis receiving methotrexate. *Arthritis Rheum.* 2010 Nov;62(11):3154-60.

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