

**ARC-902, Adc-Ahx-(D-Arg)<sub>6</sub>-NH<sub>2</sub>**, bisubstrate-analog inhibitor of basophilic protein kinases.<sup>1,2</sup>

**Quantity:** 500 µg of Adc-Ahx-(D-Arg)<sub>6</sub>-NH<sub>2</sub>, trifluoroacetate salt. Content of free ligand 50% (**0.2 micromol** by UV spectroscopy,  $\epsilon = 15\,000\text{ M}^{-1}\text{cm}^{-1}$  at 259 nm).

**Description:** Bisubstrate analog inhibitor of basophilic protein kinases; conjugate of adenosine and hexa(D-arginine). Characterized in a panel of 52 kinases. Inhibits cAMP-dependent protein kinase (PKA) with low nanomolar potency. Inhibits MAPKAP-K1b/rsk-2, ROCK-II, MSK1, akt/PKB and PRK2 (residual activity of less than 12% at 1.0 µM of ARC-902 at 100 µM ATP concentration).

**Molecular Formula:** C<sub>52</sub>H<sub>95</sub>N<sub>31</sub>O<sub>11</sub>

**Molecular Weight:** 1330.5

**MALDI-TOF mass spectrometry (m/z):** 1331 (M+H) and 1353 (M+Na)

**UV spectroscopy:** molar extinction coefficient of  $15\,000\text{ M}^{-1}\text{cm}^{-1}$  at  $\lambda_{\text{max}} = 259\text{ nm}$ .

**Purity:** >95% by HPLC

**Solubility:** H<sub>2</sub>O (> 10 mg/ml), DMSO (> 10 mg/ml).

**Storage:** Freezer (-20°C). Hygroscopic. This product is stable for at least 1 year as supplied.

**References:**

1. E. Enkvist et al. Conjugation of Adenosine and Hexa-(D-arginine) Leads to a Nanomolar Bisubstrate-Analog Inhibitor of Basophilic Protein Kinases. *Journal of Medicinal Chemistry*, (2006) 49(24), 7150 - 7159.
2. K. Viht et al. Surface-plasmon-resonance-based biosensor with immobilized bisubstrate analog inhibitor for the determination of affinities of ATP- and protein-competitive ligands of cAMP-dependent protein kinase, *Analytical Biochemistry*, (2007), 362, 268-277.

The product is covered by patent application and it is sold under the exclusive license from the University of Tartu.