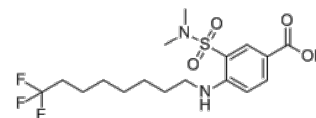


**Product Name** : ARN23746  
**Cat. No.** : PC-72424  
**CAS No.** : 2497525-96-7  
**Molecular Formula** : C<sub>17</sub>H<sub>25</sub>F<sub>3</sub>N<sub>2</sub>O<sub>4</sub>S  
**Molecular Weight** : 410.452  
**Target** : Na-K-Cl Cotransporter (NKCC)  
**Solubility** : 10 mM in DMSO



## Biological Activity

ARN23746 (IAMA-6) is a potent, selective inhibitor of Na<sup>+</sup>-K<sup>+</sup>-Cl<sup>-</sup> importer **NKCC1**, shows NKCC1 inhibition 31.8% at 10 uM, and 95.2% at 100 uM in the Cl<sup>-</sup> influx assay on NKCC1-transfected HEK293 cells.

ARN23746 did not show significant NKCC2 inhibition and KCC2 inhibition at 10 uM.

ARN23746 selectively blocks NKCC1 in a human cell line and restore the physiological [Cl<sup>-</sup>]<sub>i</sub> in murine DS neurons in culture, has excellent solubility and metabolic stability, and displays no issues with off-target activity in vitro.

ARN23746 demonstrated in vivo efficacy in rescuing cognitive impairment in a DS mouse model and social deficits and repetitive behaviors in an autism mouse model.

## References

Savardi A, et al. *Chem.* 2020 Aug 6;6(8):2073-2096.

Borgogno M, et al. *J Med Chem.* 2021 Jul 22;64(14):10203-10229.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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