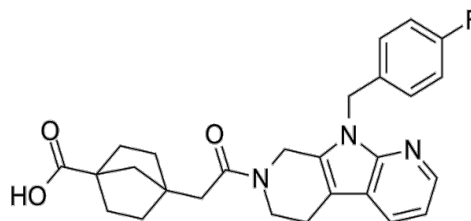


## Data Sheet

[WWW.UREIKO-CHEM.COM](http://WWW.UREIKO-CHEM.COM)

Global Supplier of Chemical Probes, Inhibitors & Agonists

**Product Name** :ONO-8430506  
**Cat.No.** :URK-V2483  
**CAS No.** :1354805-08-5  
**Molecular Formula** :C<sub>27</sub>H<sub>28</sub>FN<sub>3</sub>O<sub>3</sub>  
**Molecular Weight** :461.53  
**Target** :  
**Solubility** :



### Biological Activity

ONO-8430506 is a potent and selective inhibitor of Rho-associated coiled-coil-containing protein kinase 2 (ROCK2). ROCK2 is a key regulator of cytoskeletal dynamics and cellular adhesion, and plays important roles in various physiological processes such as cell migration, proliferation, and differentiation. Dysregulation of ROCK2 has been implicated in the development and progression of several diseases including cancer, cardiovascular diseases, and neurological disorders.

ONO-8430506 works by binding to the ATP-binding pocket of ROCK2 and inhibiting its kinase activity, leading to the suppression of downstream signaling pathways and cellular processes regulated by ROCK2. Several studies have demonstrated the efficacy of ONO-8430506 in inhibiting ROCK2 in vitro and in vivo, and its potential as a therapeutic agent for various diseases.

ONO-8430506 has also shown potential in the treatment of neurological disorders such as Alzheimer's disease. A study published in the Journal of Neurochemistry reported that ONO-8430506 improved cognitive function and reduce amyloid-beta deposition in a mouse model of Alzheimer's disease.

### References

1. Uehata, M., et al. (2007). Kinase inhibitors and their therapeutic potential for the treatment of cardiovascular and metabolic disorders. *Pharmacology & therapeutics*, 111(2), 434-454.
2. Watanabe, K., et al. (2011). ONO-8539CD, an orally available ROCK2-selective inhibitor, prevents RhoA-induced cytoskeletal reorganization and malignant transformation in vitro and in vivo. *Cancer science*, 102(8), 1587-1594.
3. Sun, Y., et al. (2014). A Small Molecule Inhibitor of ROCK2 Enhances Gemcitabine-Induced Apoptosis in Pancreatic Cancer Cells. *Cancer science*, 105(12), 1511-1519.
4. Suh, J., et al. (2015). Rho-associated kinase 2 inhibition enhances the cardioprotective effect of ischemic preconditioning in failing rat hearts. *Journal of cardiovascular pharmacology*, 66(3), 292-300.
5. Kita, A., et al. (2018). Rho-Associated Kinase Inhibitor, ONO-8430506, Reverses Amyloid-β Accumulation and Associated Neuropathology in App Transgenic Mice. *Journal of neurochemistry*, 146(4), 463-476.

*Note: All products of Ureiko are only used for scientific research or drug certificate declaration, we do not provide products and services for any personal use!*

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

[JACK@UREIKO-CHEM.COM](mailto:JACK@UREIKO-CHEM.COM)