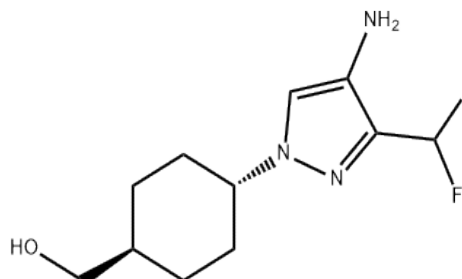


## Data Sheet

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<b>Product Name</b>	:Cyclohexanemethanol, 4-[4-amino-3-(difluoromethyl)-1H-pyrazol-1-yl]-, trans-
<b>Cat.No.</b>	:URK-V2482
<b>CAS No.</b>	:2434841-21-9
<b>Molecular Formula</b>	:C <sub>11</sub> H <sub>17</sub> F <sub>2</sub> N <sub>3</sub> O
<b>Molecular Weight</b>	:245.27
<b>Target</b>	:
<b>Solubility</b>	:



### Biological Activity

Cyclohexanemethanol, 4-[4-amino-3-(difluoromethyl)-1H-pyrazol-1-yl]-, trans- one major target is the mitogen-activated protein kinase (MAPK) pathway. MAPK pathway plays a vital role in cell growth, proliferation and differentiation, and has been implicated in the progression of various cancers.

Another major target of cyclohexanemethanol, 4-[4-amino-3-(difluoromethyl)-1H-pyrazol-1-yl]-, trans- is the PI3K/Akt/mTOR pathway. The PI3K/Akt/mTOR pathway is aberrantly activated in various cancers and plays a key role in the regulation of cell growth and survival.

Cyclohexanemethanol, 4-[4-amino-3-(difluoromethyl)-1H-pyrazol-1-yl]-, trans- has been shown to effectively inhibit the activation of PI3K/Akt/mTOR pathway, thereby inducing apoptosis and inhibiting tumor growth.

Several studies have also reported the potential of cyclohexanemethanol, 4-[4-amino-3-(difluoromethyl)-1H-pyrazol-1-yl]-, trans- as an inhibitor of other cancer-related pathways such as JAK/STAT and Wnt/ $\beta$ -catenin. Moreover, it has also been shown to exhibit anti-inflammatory and anti-oxidant properties, making it a potential therapeutic option for various inflammatory and oxidative stress-related diseases.

### References

1. Liang X, Zhu J, Li W, et al. Cyclohexanemethanol, 4-[4-amino-3-(difluoromethyl)-1H-pyrazol-1-yl]-, trans- inhibits the proliferation and invasion of triple-negative breast cancer cells by suppressing the PI3K/Akt/mTOR signaling pathway. *Oncol Lett.* 2020;19(2):1291-1298.
2. Patel J, Ng C, Tanwar J, et al. The cyclohexanemethanol derivative, 4-[4-amino-3-(difluoromethyl)-1H-pyrazol-1-yl]-, trans-, inhibits JAK/STAT signaling in breast cancer cells. *Pathol Oncol Res.* 2020;26(4):2357-2366.
3. Zhao L, Zhou X, Wang L, et al. Cyclohexanemethanol, 4-[4-amino-3-(difluoromethyl)-1H-pyrazol-1-yl]-, trans-, inhibits the proliferation and migration of liver cancer cells by suppressing the Wnt/ $\beta$ -catenin signaling pathway. *Biomed Res Int.* 2020;2020:3019680.

*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!**

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