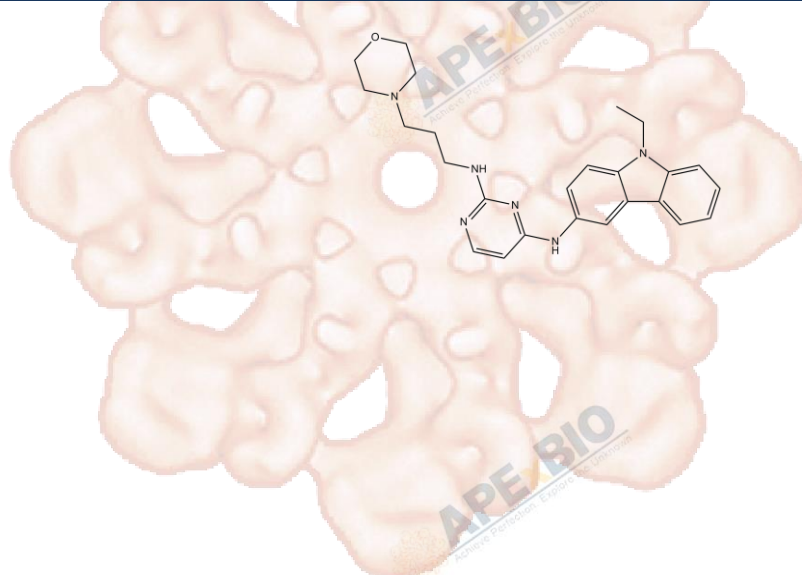


# Product Data Sheet

## EHop-016

|                  |  |
|------------------|--|
| <b>Cat. No.:</b> | B2219  |
| <b>CAS No.:</b>  | 1380432-32-5                                     |
| <b>Formula:</b>  | C <sub>25</sub> H <sub>30</sub> N <sub>6</sub> O |
| <b>M.Wt:</b>     | 430.55   |
| <b>Synonyms:</b> |  |
| <b>Target:</b>   | Cell Cycle/Checkpoint                            |
| <b>Pathway:</b>  | Rho  |
| <b>Storage:</b>  | Store at -20°C                                   |



### Solvent & Solubility

≥25.6 mg/mL in DMSO with gentle warming; insoluble in EtOH; insoluble in H<sub>2</sub>O

In Vitro

| Preparing Stock Solutions | Mass                  |           |            |            |
|---------------------------|-----------------------|-----------|------------|------------|
|                           | Solvent Concentration | 1mg       | 5mg        | 10mg       |
|                           | 1 mM                  | 2.3226 mL | 11.6131 mL | 23.2261 mL |
|                           | 5 mM                  | 0.4645 mL | 2.3226 mL  | 4.6452 mL  |
|                           | 10 mM                 | 0.2323 mL | 1.1613 mL  | 2.3226 mL  |

Please refer to the solubility information to select the appropriate solvent.

### Biological Activity

Shortsummary

Rac1/Rac3 GTPase inhibitor, potent and specific

IC<sub>50</sub> & Target

1.1 μM (Rac1)

In Vitro

#### Cell Viability Assay

|                      |  |
|----------------------|--|
| Cell Line:           | MDA-MB-435 and MDA-MB-231 metastatic cancer cells  |
| Preparation method:  | The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months. |
| Reacting conditions: | 0–10 μM for 24 h   |

|         |                          |  |
|---------|--------------------------|--|
|         | Applications:            | EHop-016 inhibited Rac activity and reduced Rac-directed lamellipodia formation in both MDA-MB-435 and MDA-MB-231 metastatic cancer cells. Moreover, EHop-016 decreased Rac downstream effects of PAK1 (p21-activated kinase 1) activity and directed metastatic cancer cells migration. |
| In Vivo | <b>Animal experiment</b> |  |
|         | Animal models:           | KITD814V-bearing mice model  |
|         | Dosage form:             | 2.5 µM; i.v. injection, for 45 days;   |
|         | Applications:            | Treatment of KITD814V-bearing cells with EHop-016 significantly enhanced leukemic mice survival and delayed disease progression.   |
|         | Other notes:             | Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.   |

## Product Citations

1. Jones BC, Kelley LC, et al. "Dual Targeting of Mesenchymal and Amoeboid Motility Hinders Metastatic Behavior." Mol Cancer Res. 2017 Jun;15(6):670-682. PMID:28235899

See more customer validations on [www.apexbt.com](http://www.apexbt.com).

## References

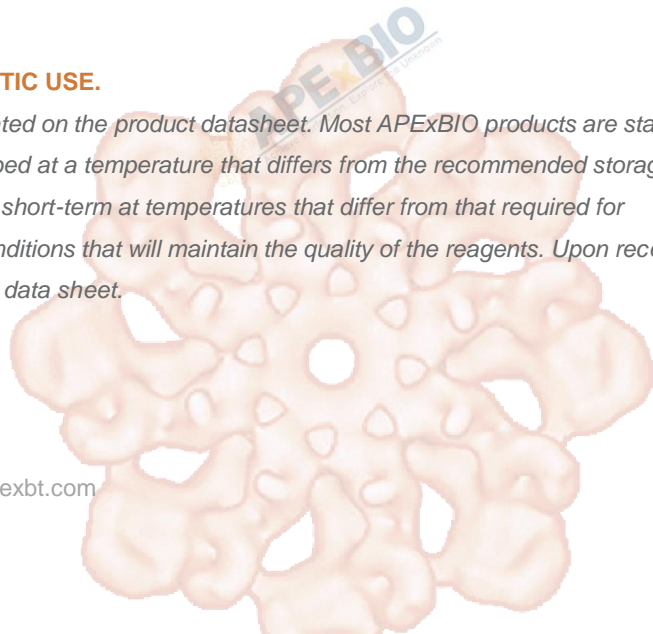
1. Montalvo-Ortiz, B. L., Castillo-Pichardo, L., Hernandez, E., Humphries-Bickley, T., De la Mota-Peynado, A., Cubano, L. A., Vlaar, C. P. and Dharmawardhane, S. (2012) Characterization of EHop-016, novel small molecule inhibitor of Rac GTPase. J Biol Chem. 287, 13228-13238
2. Martin, H., Mali, R. S., Ma, P., Chatterjee, A., Ramdas, B., Sims, E., Munugalavadla, V., Ghosh, J., Mattingly, R. R., Visconte, V., Tiu, R. V., Vlaar, C. P., Dharmawardhane, S. and Kapur, R. (2013) Pak and Rac GTPases promote oncogenic KIT-induced neoplasms. J Clin Invest. 123, 4449-4463

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



---

**APEx BIO Technology**

[www.apexbt.com](http://www.apexbt.com)

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: [info@apexbt.com](mailto:info@apexbt.com)

