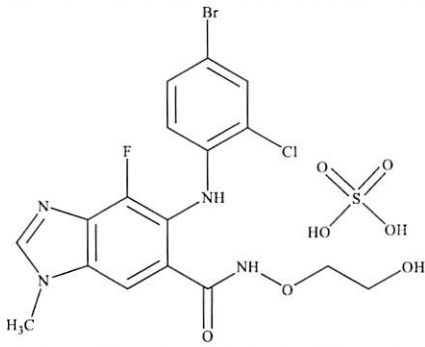


## Certificate of Analysis



Certificate No.: **20250616008**

Date: June 16, 2025

Retest date: June 9, 2028

|                              |  |   |
|------------------------------|--|---|
| <b>Compound Name:</b>        | <b>Selumetinib Sulfate</b>   |   |
| <b>Synonyms:</b>             | 5-((4-bromo-2-chlorophenyl)amino)-4-fluoro- <i>N</i> -(2-hydroxyethoxy)-1-methyl-1 <i>H</i> -benzo[ <i>d</i> ]imidazole-6-carboxamide, sulfuric acid (1:1) |   |
| <b>TLC Catalogue Number:</b> | S-256001   |  |
| <b>CAS Number:</b>           | 943332-08-9  |   |
| <b>Alternate CAS Number:</b> | 606143-52-6 (free base)  |   |
| <b>Molecular Weight:</b>     | 457.68 98.07   |   |
| <b>Molecular Formula:</b>    | C <sub>17</sub> H <sub>15</sub> BrClFN <sub>4</sub> O <sub>3</sub> · H <sub>2</sub> SO <sub>4</sub>  |   |
| <b>Source:</b>               | TLC Pharmaceutical Standards   |   |
| <b>Source Lot No.:</b>       | 6683-095A1   |   |
| <b>Storage Conditions:</b>   | Store at 2-8 °C  |   |
| <b>Solubility:</b>           | DMSO, DMF  |   |

| Test Description               | Specifications        | Results         |
|--------------------------------|-----------------------|-----------------|
| <b>Visual Description</b>      | Off-white solid       | <b>Conforms</b> |
| <b>Identification</b>          |                       |                 |
| <b>IR</b>                      | Conforms to structure | <b>Conforms</b> |
| <b>MS</b>                      | Conforms to structure | <b>Conforms</b> |
| <b><sup>1</sup>H NMR</b>       | Conforms to structure | <b>Conforms</b> |
| <b>Purity (HPLC)</b>           | Not less than 95.0%   | <b>100.0%</b>   |
| <b>Impurity (HPLC)</b>         | N/A                   |                 |
| <b>Water Content (KF)</b>      | N/A                   | <b>0.2%</b>     |
| <b>Residue (TGA at 900 °C)</b> | N/A                   | <b>0.2%</b>     |
| <b>S% (Titration)</b>          | 5.8%                  | <b>5.8%</b>     |
| <b>Residual Solvents (NMR)</b> | 0.1% tetrahydrofuran  |                 |
| <b>Assay (%)</b>               | Not less than 90.0%   | <b>99.5%</b>    |
| <b>Recommendation:</b>         | <b>Release.</b>       |                 |

| Name                      | Department        | Signature  | Date       |
|---------------------------|-------------------|--|------------|
| Reviewed and approved by: | Quality Control   |  | 06/17/2025 |
| Approved by:              | Quality Assurance |  | 06/17/2025 |

**Attachments:** Peak Attribution Table, HPLC, IR, MS, NMR and TGA spectra.