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## Product Datasheet

**IACS-010759, CAS [[1570496-34-2]]**

**FBM-10-4475**

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| Article Name               | IACS-010759, CAS [[1570496-34-2]]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Biozol Catalog Number      | FBM-10-4475                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Supplier Catalog Number    | 10-4475                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Alternative Catalog Number | FBM-10-4475-5MG,FBM-10-4475-25MG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Manufacturer               | Focus Biomolecules                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Category                   | Biochemikalien                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Product Description        | Mitochondrial Complex I Inhibitor...                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Molecular Weight           | 562.57                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Purity                     | >98% by HPLC NMR (Conforms)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Form                       | White to off-white solid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| CAS Number                 | [1570496-34-2]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Formula                    | C25H25F3N6O4S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Application Notes          | <p>IACS-010759 (1570496-34-2) is a potent (<math>IC_{50} = 1.1</math> nM isolated mouse complex I) and selective inhibitor of complex I of the mitochondrial electron transport chain (OXPHOS). IACS-010759 displayed in vivo efficacy in glycolysis-deficient glioblastoma and AML models without cytotoxicity to normal cells. The lack of cytotoxicity to normal cells, as opposed to other complex I inhibitors, is attributed to its unique binding location on complex I.<sup>2</sup> Complex I inhibition by IACS-010759 causes an ROS-induced decrease in the endogenous PP2A inhibitor CIP2A leading to cell death.<sup>3</sup> It has also displayed potential in various chemotherapy-resistant cancer cell lines.<sup>4-7</sup></p> |