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## Product Datasheet

### Monastrol, CAS [[254753-54-3]] FBM-10-2629

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| Article Name               | Monastrol, CAS [[254753-54-3]]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Biozol Catalog Number      | FBM-10-2629                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Supplier Catalog Number    | 10-2629                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Alternative Catalog Number | FBM-10-2629-5MG,FBM-10-2629-25MG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Manufacturer               | Focus Biomolecules                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Category                   | Biochemikalien                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Product Description        | Kinesin Eg5 and mitosis inhibitor...                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Molecular Weight           | 292.35                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Purity                     | 98% by TLC NMR (Conforms)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Form                       | Beige solid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| CAS Number                 | [254753-54-3]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Formula                    | C <sub>14</sub> H <sub>16</sub> N <sub>2</sub> O <sub>3</sub> S                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Application Notes          | Potent, cell-permeable, small molecule inhibitor of mitosis. Monastrol-arrested cells are characterized by monopolar spindles. <sup>1</sup> Does not affect other motor proteins or tubulin. Specifically inhibits the mitotic molecular motor kinesin Eg5, a motor protein required for spindle formation (IC <sub>50</sub> = 14 µM). <sup>2</sup> Mimics the effect of amyloid beta on long term potentiation in a cellular model of learning and memory. <sup>3</sup> Enhances regeneration of adult axons. <sup>4</sup> |