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## Product Datasheet

**Methylbenzoprim, CAS [[118344-71-1]]**  
**FBM-10-4892**

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| Article Name               | Methylbenzoprim, CAS [[118344-71-1]]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Biozol Catalog Number      | FBM-10-4892                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Supplier Catalog Number    | 10-4892                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Alternative Catalog Number | FBM-10-4892-5MG,FBM-10-4892-25MG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Manufacturer               | Focus Biomolecules                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Category                   | Biochemikalien                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Product Description        | Dual TYMS/DHFR inhibitor...                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Molecular Weight           | 378.44                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Purity                     | >98% by HPLC NMR (Conforms)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Form                       | Red/Orange solid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| CAS Number                 | [118344-71-1]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Formula                    | C20H22N6O2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Application Notes          | <p>Methylbenzoprim, a derivative of the antimalarial drug Pyrimethamine, is a non-classical potent inhibitor of mammalian dihydrofolate reductase (IC50 = 3.2 nM rat liver).<sup>1</sup> It inhibited melanoma tumor growth both in vitro and in vivo.<sup>2</sup> Methylbenzoprim has been recently found to also inhibit thymidylate synthase (TYMS) with activity comparable to the 5-FU metabolite FdUrd.<sup>3</sup> It was more potent than 5-fluorouracil in a panel of 4 pancreatic ductal adenocarcinoma cells lines and without TYMS overexpression that frequently leads to drug resistance.<sup>3</sup> Methylbenzoprim inhibited tumor growth and progression in two pancreatic cancer xenograft models. Orally bioavailable.</p> |