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## Product Datasheet

### **RS-1, CAS [[312756-74-4]] FBM-10-4099**

Artikelname	RS-1, CAS [[312756-74-4]]
Artikelnummer	FBM-10-4099
Hersteller Artikelnummer	10-4099
Alternativnummer	FBM-10-4099-10MG,FBM-10-4099-50MG
Hersteller	Focus Biomolecules
Kategorie	Biochemikalien
Produktbeschreibung	RAD51 activator/CRISPR enhancer...
Molekulargewicht	524.23
Reinheit	99% by HPLC, NMR (Conforms)
Formulierung	White solid
CAS Nummer	[312756-74-4]
Formel	C20H16Br2N2O3S

Anwendungsbeschreibung

RAD51 is a strand exchange protein that is critical for the central steps in homologous recombination (HR) of DNA during double strand break repair. Because HR usually occurs without mutations, it is critically important for maintaining genomic stability. RS-1 is a small molecule that enhances the HR activity of RAD51 by promoting the formation of active presynaptic filaments during repair.<sup>1</sup> At low micromolar levels, it was able to increase cellular resistance of neonatal human dermal fibroblasts to the chemotherapeutic agent cisplatin. HR stimulation in various cell types could lead to temporary protection from DNA damaging agents. RS-1 has been used to exploit the RAD51 overexpression in cancerous cells by inducing lethality via genotoxic RAD51 protein complexes.<sup>2</sup> RS-1 has also been found to a potent enhancer of CRISPR- and TALEN- based gene editing.<sup>3,4</sup>