

Methotrexate Conjugates

Cytotoxic agent that binds and inhibits dihydrofolate reductase. Useful for studying antimetabolite resistance, spontaneous gene amplification, and drug binding. Available conjugated to fluorescein and CF® Dyes.



Product attributes

Colors	Green, Red, Far-red
Storage Conditions	Store at -10 to -35 °C, Protect from light, Desiccate

Product Description

Methotrexate is a cytotoxic agent used as a chemotherapeutic and immunosuppressant. It is actively taken up by cells and binds to and inhibits dihydrofolate reductase, thereby inhibiting folic acid metabolism and inducing cell cycle arrest. Methotrexate fluorescein is useful for studying antimetabolite resistance and spontaneous gene amplification. Other dye conjugates of methotrexate may not be transported into cells, but may have other applications for studies of drug binding.

Biotium offers methotrexate conjugated to fluorescein and a selection of our next-generation fluorescent CF® Dyes.

Methotrexate Conjugates

Conjugation	Ex/Em	Size	Catalog No.	Dye Features
CF@488A	490/516 nm	1 mg	00091	CF@488A Features
CF@568	562/584 nm	1 mg	00092	CF@568 Features
CF@594	593/615 nm	1 mg	00093	CF@594 Features
CF@640R	642/663 nm	1 mg	00094	CF@640R Features
Fluorescein (FITC)	498/517 nm	1 mg	00023	

Biotium's next-generation CF® Dyes were designed to be highly water-soluble with advantages in brightness and photostability compared to other commercially available fluorescent dyes. [Learn more about CF® Dyes.](#)

References

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- Biochemistry 50, 6789 (2011), [DOI: 10.1021/bi200779u](#)
- J Cell Biol 162, 23 (2003), [DOI: 10.1083/jcb.200303098](#)
- Nat Biotechnol 19, 769 (2001), [DOI: 10.1038/90831](#)
- J Biol Chem 257, 14162 (1982), [PMID: 7142200](#)

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