

FITC-Dextran (MW 110000)

Cat. No.:	HY-128868F
CAS No.:	60842-46-8
Target:	Biochemical Assay Reagents
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

FITC-Dextran (MW 110000)

BIOLOGICAL ACTIVITY

Description	FITC-Dextran (MW 110000) is a compound belonging to the class of fluorescent dyes. It is commonly used in biomedical research as a tracer molecule to label and track cells or other biological matter. FITC-Dextran consists of fluorescein isothiocyanate (FITC) and dextran, a complex carbohydrate derived from starch. The combination of the two creates a stable fluorescent tracer that can be viewed under a microscope or quantified using specialized detection instruments.
In Vitro	FITC-Dextran (MW 110000) is a fluorescent probe for fluorescein isothiocyanate (FITC) dextran (Ex=495 nm; Em=525 nm). FITC-Dextran (MW 110000) can be used as a marker to reveal heat shock-induced cell damage and to study the early and late stages of apoptosis. FITC-Dextran (MW 110000) can also be used for cell permeability studies, such as blood-brain barrier permeability and determination of the extent of blood-brain barrier disruption ^{[1][2][3]} . Storage: protect from light. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs). For intestinal barrier function assay ^[5] <ol style="list-style-type: none">1. Fast mice for 4 h.2. Orally gavage mice with FITC-Dextran MW 110000 (0.6 mg/g).3. Measure fluorescence intensity of plasma in 4 h (excitation nm/emission 520 nm). MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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- [2]. Natarajan R, et al. Fluorescein Isothiocyanate (FITC)-Dextran Extravasation as a Measure of Blood-Brain Barrier Permeability. Curr Protoc Neurosci. 2017 Apr 10;79:9.58.1-9.58.15.
- [3]. Eriksson I, et al. Analysis of Lysosomal pH by Flow Cytometry Using FITC-Dextran Loaded Cells. Methods Mol Biol. 2017;1594:179-189.
- [4]. Okabayashi K, et al. Cdc42 activates paracellular transport in polarised submandibular gland cells. Arch Oral Biol. 2021 Dec;132:105276.
- [5]. Yu W, et al. ACE2 contributes to the maintenance of mouse epithelial barrier function. Biochem Biophys Res Commun. 2020 Dec 17;533(4):1276-1282.

Caution: Product has not been fully validated for medical applications. For research use only.

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