

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human mCherry in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2783C
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Human mCherry synthetic peptide
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide

*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Flow Cytometry Titration recommended for optimal concentration with starting range of 0.1-1 µg/1 million cells. Sample used for this experiment was HEK293 human embryonic kidney cell line transfected with mCherry.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage **Protect from light. Do not freeze.**

- 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

mCherry is a member of the mFruits family of monomeric red fluorescent proteins. It was derived from DsRed of *Discosoma* sea anemones. mFruit are second-generation monomeric red fluorescent proteins that have improved brightness and photostability compared to first-generation proteins. The gene for mCherry is 711 bp long and the protein is made up of 236 residues with a mass of 76.722 kDa. mCherry is used in fluorescence microscopy as an intracellular probe where constitutive gene expression is desired and other experimental approaches require coordinated control of multiple genes.

References:

References **Shaner, N. C., Campbell, R. E., Steinbach, P. A., Giepmans, B. N. G., Palmer, A. E., Tsien, R. Y. "Improved Monomeric Red, Orange and Yellow Fluorescent Proteins Derived from *Discosoma* Sp. Red Fluorescent Protein" *Nature Biotechnology*. 22(12): 1567-1572. 2004 Nov 21. Shu, X., Shaner N. C., Yarbrough, C. A., Tsien, R. Y., Remington S. J. "Novel Chromophores and Buried Charges Control Color in mFruits" *Biochemistry*. 45(32):9639-9647. 2006 Aug. Gebhardt, M. J., Jacobson, R. K., Shuman, H. "Seeing Red; The Development of pON mCherry, a Broad-host Range Constitutive Expression Plasmid for Gram-negative Bacteria" *POS ONE*. 12(3):e173116. 2017 Mar 3.**

PRODUCT SPECIFIC NOTICES

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