

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human mCherry in direct ELISAs.
<b>Source</b>	Recombinant Monoclonal Rabbit IgG Clone # 2783C
<b>Purification</b>	Protein A or G purified from cell culture supernatant
<b>Immunogen</b>	Human mCherry synthetic peptide
<b>Conjugate</b>	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
<b>Formulation</b>	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**

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> • 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 71 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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