

## Recombinant mCherry Fluorescent Protein

<b>CATALOG #:</b>	4993-100	100 µg
	4993-1000	1 mg
<b>LOT #:</b>	_____	
<b>SOURCE:</b>	<i>E. coli</i>	
<b>PURITY:</b>	≥97% by SDS-PAGE and HPLC	
<b>ENDOTOXIN:</b>	≤0.1 ng/µg	
<b>FORM:</b>	Freeze Dried	
<b>Reconstitution:</b>	Reconstitute with dH <sub>2</sub> O to 1 mg/ml	
<b>STORAGE:</b>	-80°C for long-term storage	

### DESCRIPTION:

mCherry is the second generation monomeric red fluorescent protein that have improved brightness and photostability. The recombinant mCherry is expressed and purified from transformed *E. coli* using a method that ensures high purity and maximal fluorescence intensity. The protein is a 28.8 kDa monomer with 256 amino acids, pI: 6.23. Ex.= 587 nm (540-590 nm); Em.= 610 nm (550-650 nm). The protein is engineered with 6xHis-tag on the N-terminus, which can be used for detection with anti-His-Tag antibody (BioVision Cat # 3998-100) or protein purification/removal by using Ni<sup>++</sup> beads.

### mCherry PROTEIN SEQUENCE:

MGSSHHHHHSSGLVPRGSHMVSKEEDNMAIIKEFMRFKVHMEGVSNGHEFEIEGEGEG  
 RPYEGTQTAKLKVKTKGGPLPFAWDILSPQFMYGSKAYVKHPADIPDYLLKLSFPEGFKWERVM  
 NFDGGVVTVTQDSSLQDGEFIYKVKLRGTNFPDGPVMQKKTMGWEASSERMYPEDGAL  
 KGEIKQRLKLDGGHYDAEVKTTYKAKKPVQLPGAYNVNIKLDITSHNEDYTYEQYERAEGR  
 HSTGGMDELYK

### APPLICATIONS:

The protein is suitable as a positive control for mCherry protein expression studies or as a labeling reagent. Applications include: Use as standards for SDS-PAGE, Western blot analysis of mCherry transfected cells, label other proteins or antibodies, calibration of fluorometers and flow cytometers, fluorescence microscope, or microinjection of mCherry protein into cells and tissues, etc. The recombinant mCherry protein is ideal for fusion tag applications and is perfect for triple labeling with EGFP (Cat.# 4999-100), CFP (Cat.# 4994-100), YFP (Cat.# 4998-100), or any other dyes. The 6XHis-Tag on the N-terminal can be used in Western blot detection with 6XHis-tag antibodies (BioVision Cat # 3998-100). The 6XHis-tag can also be used in removal or purification of the mCherry protein.

### RELATED PRODUCTS:

- Apoptosis Detection Kits & Reagents
  - Annexin V Kits & Bulk Reagents
  - Caspase Assay Kits & Reagents
  - Mitochondrial Apoptosis Kits & Reagents
  - Nuclear Apoptosis Kits & Reagents
  - Apoptosis Inducers & Inhibitors
- Cell Fractionation System
  - Mitochondria/Cytosol Fractionation Kit
  - Nuclear/Cytosol Fractionation Kit
  - Membrane Protein Extraction Kit
  - Cytosol/Particulate Rapid Separation Kit
  - Mammalian Cell Extraction Kit
  - FractionPREP Fractionation System
- Cell Proliferation & Senescence
  - Quick Cell Proliferation Assay Kit
  - Senescence Detection Kit
  - High Throughput Apoptosis/Cell Viability Assay Kits
  - LDH-Cytotoxicity Assay Kit
  - Bioluminescence Cytotoxicity Assay Kit
  - Live/Dead Cell Staining Kit
- Signal Transduction
  - cAMP & cGMP Assay Kits
  - Akt & JNK Activity Assay Kits
  - Beta-Secretase Activity Assay Kit
  - HDAC and HAT Activity Assay Kits
- Metabolism Assays
  - Ascorbic Acid, Lactate, Pyruvate, Uric Acid , Ethanol Assay Kits
  - Glucose, Sucrose, Galactose, Lactose, Maltose Assay Kits
  - NAD/NADH, NADP/NADPH, ADP/ATP Assay Kits
  - Glycogen, Sarcosine, Fatty acid, ammonia, Urea assay kits
  - Cholesterol, HDL/LDL, Triglyceride Assay Kits
  - Glutathione, GST, Nitric Oxide Detection Kits
- Fluorescence Proteins and Antibodies
  - Green Fluorescence Protein
  - Red Fluorescence Protein
  - Cyan Fluorescence Protein
  - Yellow Fluorescence Protein
  - Blue Fluorescence Protein
  - Anti-His Polyclonal and Monoclonal Antibodies
- Growth Factors & Cytokines
  - Adiponectins, BMPs, FGFs, IFNs, IGFs, Chemokines
  - Complement C5a, Interleukins, TGF-Alpha & beta
  - Protein A/G/L
  - VEGFs