

Anti-mCherry Antibody [A9F2]

HA601186



Product Type:	Mouse monoclonal IgG2b, primary antibodies
Species reactivity:	Species independent
Applications:	WB, IF-Cell
Clone number:	A9F2

Description: mCherry is a member of the mFruits family of monomeric red fluorescent proteins (mRFPs). As a RFP, mCherry was derived from DsRed of *Discosoma* sea anemones unlike green fluorescent proteins (GFPs) which are often derived from *Aequorea victoria* jellyfish. Fluorescent proteins are used to tag components in the cell, so they can be studied using fluorescence spectroscopy and fluorescence microscopy. mCherry absorbs light between 540-590 nm and emits light in the range of 550-650 nm. mCherry belongs to the group of fluorescent protein chromophores used as instruments to visualize genes and analyze their functions in experiments. Genome editing has been improved greatly through the precise insertion of these fluorescent protein tags into the genetic material of many diverse organisms. Most comparisons between the brightness and photostability of different fluorescent proteins have been made in vitro, removed from biological variables that affect protein performance in cells or organisms. It is hard to perfectly simulate cellular environments in vitro, and the difference in environment could have an effect on the brightness and photostability.

Immunogen: Recombinant protein within mCherry aa 1-236 / 236.

Database links: SwissProt: X5DSL3 *Anaplasma Marginale*

Recommended Dilutions:

WB	1:2,000-1:5,000
IF-Cell	1:2,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

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Images

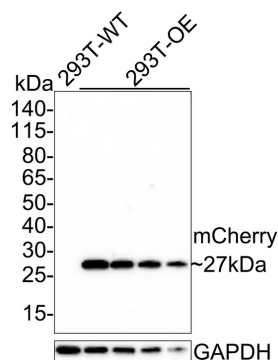


Fig1: Western blot analysis of mCherry on different lysates with Mouse anti-mCherry antibody (HA601186) at 1/2,000 dilution.

Lane 1: 293T-WT cell lysate (5 μ g/Lane)
 Lane 2: 293T-OE-mCherry cell lysate (5 μ g/Lane)
 Lane 3: 293T-OE-mCherry cell lysate (2.5 μ g/Lane)
 Lane 4: 293T-OE-mCherry cell lysate (1.25 μ g/Lane)
 Lane 5: 293T-OE-mCherry cell lysate (0.625 μ g/Lane)

Predicted band size: 27 kDa
 Observed band size: 27 kDa

Exposure time: 30 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDm/TBST for 1 hour at room temperature. The primary antibody (HA601186) at 1/2,000 dilution was used in 5% NFDm/TBST at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/150,000 dilution was used for 1 hour at room temperature.

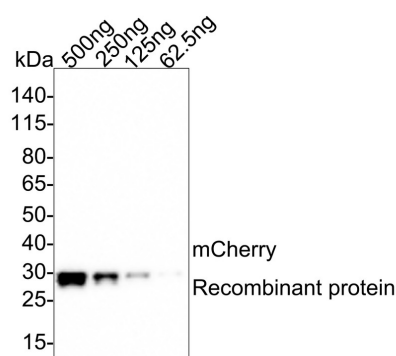


Fig2: Western blot analysis of mCherry on mCherry recombinant protein with Mouse anti-mCherry antibody (HA601186) at 1/1,000 dilution.

Lane 1: mCherry recombinant protein, 500ng/Lane
 Lane 2: mCherry recombinant protein, 250ng/Lane
 Lane 3: mCherry recombinant protein, 125ng/Lane
 Lane 4: mCherry recombinant protein, 62.5ng/Lane

Exposure time: 30 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDm/TBST for 1 hour at room temperature. The primary antibody (HA601186) at 1/1,000 dilution was used in 5% NFDm/TBST at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/150,000 dilution was used for 1 hour at room temperature.

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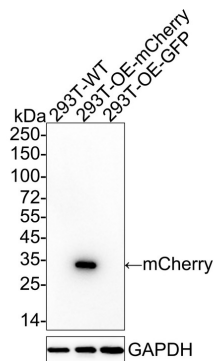
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Fig3: Western blot analysis of mCherry on different lysates with Mouse anti-mCherry antibody (HA601186) at 1/5,000 dilution.

Lane 1: 293T cell lysate

Lane 2: 293T transfected with mCherry-tagged cell lysate

Lane 3: 293T transfected with GFP-tagged cell lysate (negative)



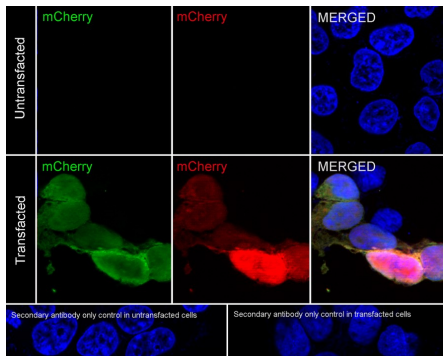
Lysates/proteins at 5 µg/Lane.

Exposure time: 3 minutes; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDN/TBST for 1 hour at room temperature. The primary antibody (HA601186) at 1/5,000 dilution was used in 5% NFDN/TBST at 4°C overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

Fig4: Immunocytochemistry analysis of 293T transfected with or without mCherry cells labeling mCherry with Mouse anti-mCherry antibody (HA601186) at 1/2,000 dilution.



Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Mouse anti-mCherry antibody (HA601186) at 1/2,000 dilution in 1% BSA in PBST overnight at 4 °C. Goat Anti-Mouse IgG H&L (iFluor™ 488, HA1125) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI. As expected, green antibody staining is only visible in cells expressing mCherry, and green and red signals can be superimposed.

Note: All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”.

Background References

1. Sun J et al. A Gli1-2A-mCherry reporter monitors systemic aging and predicts lifespan in middle-aged mice. *Nat Commun.* 2022 Nov
2. Langa S et al. Evoglow-Pp1 and mCherry proteins: a dual fluorescent labeling system for lactic acid bacteria. *Appl Microbiol Biotechnol.* 2021 Oct

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