

Anti-CaMPARI-Red [4F6] Standard Size Ab01649-1.6

This is a Fab fragment with a his-tag. Developed in partnership with Ximbio (www.ximbio.com).

This reformatted mouse antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse Fab fragment, His-Tagged, Kappa

Clone Number: 4F6

Alternative Name(s) of Target: CaMPARI 1&2; CaMPARI1; CaMPARI2; CaMPARI-Red; Calcium Modulated Photoactivatable Ratiometric Integrator; 4F6-1

UniProt Accession Number of Target Protein:

Published Application(s): WB, IF, IHC

Published Species Reactivity: Species independent

Immunogen: This antibody was originally raised by immunizing mice with a purified and photoconverted EosFP protein, subjected it to proteolysis, and further purified the proteolytic fragment containing the red chromophore which is identical to the equivalent region of CaMPARI1 and CaMPARI2.

Specificity: This antibody is specific for the photoconverted form of CaMPARI-Red (both CaMPARI1 and CaMPARI2). CaMPARI is a photoconvertible protein construct that allows imaging of the integrated calcium activity of populations of cells over time.

Application Notes: 4F6 is recommended for the detection and analysis of CaMPARI via immunohistochemistry (IHC) and Western blot (WB) (Moeyaert et al., 2018; PMID: 30361563). For instance, it was successfully used in the immunohistochemical identification of CaMPARI-Red cells in brain tissue, distinguishing them from the cells in which CaMPARI stayed in its green, unconverted form (Ebner et al., 2019; PMID: 31178713). This product ([Ab01649-23.0](#)) was used for indirect immunofluorescence (IF) staining of adult female Drosophila fly brains to visualize and detect the localization of the CaMPARI-Red protein (Gendron et al., 2023; PMID: 37310911).

Antibody First Published in: Moeyaert et al. Improved methods for marking active neuron populations Nat Commun. 2018 Oct 25;9(1):4440. doi: 10.1038/s41467-018-06935-2 [PMID:30361563](#)

Note on publication: The original publication presents the development of CaMPARI2, an improved fluorescent protein sensor with enhanced properties for marking active neuronal populations, along with the introduction of an immunohistochemical detection method using an anti-CaMPARI-red antibody for selective labeling of photoconverted CaMPARI in activated neurons in rodent brain tissue.

Product Form

Size: 100 µg Purified antibody.

Purification: Purified by Immobilized Metal Affinity Chromatography

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.