

Product datasheet

anti-Channelrhodopsin 2 mouse monoclonal, 15E2, lyophilized, purified

Short overview

Cat. No.	610180
Quantity	50 µg
Concentration	50 µg/ml after reconstitution with 1 ml PBS

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG2a
Clone	15E2
Immunogen	Purified recombinant ChR2-315
Formulation	Lyophilized; reconstitute in 1 ml sterile PBS
Synonym	ChR2
Conjugate	Unconjugated
Purification	Affinity chromatography
Storage before reconstitution	2-8°C until indicated expiry date
Storage after reconstitution	Up to 3 months at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles
Intended use	Research use only
Application	ELISA, ICC/IF, IHC, WB
Reactivity	Chlamydomonas

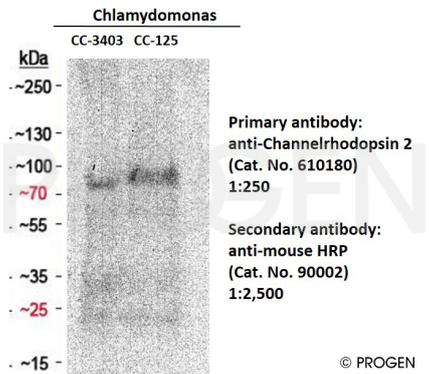
Applications

ELISA	1:20-1:500
Immunocytochemistry (ICC)	Assay dependent
Immunohistochemistry (IHC) - frozen	Assay dependent
Immunohistochemistry (IHC) - paraffin	No data available
Western Blot (WB)	1:250-1:3,000

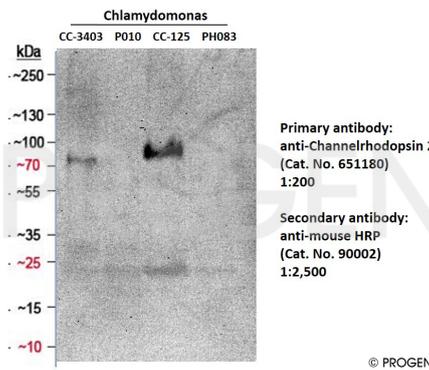
Background

Channelrhodopsin 2 (ChR2) is a cation-permeable channel protein that enables cell depolarisation in response to blue light. The antibody specifically detects the C terminus of ChR2. The epitope is located intracellularly between amino acids 290 and 309 of Chr2.

Product images



anti-Channelrhodopsin 2 antibody in western blot



anti-Channelrhodopsin 2 antibody in western blot

References

Publication	Species	Application
Weiglein, A. et al. Aversive teaching signals from individual dopamine neurons in larval Drosophila show qualitative differences in their temporal fingerprint., J Comp Neurol 529, 1553-1570, (2021)	Chlamydomonas Channelrhodopsin 2	IHC-IF
Cui, L.J. et al. nGnG Amacrine Cells and Brn3b-negative M1 ipRGCs are Specifically Labeled in the ChAT-ChR2-EYFP Mouse. Invest Ophthalmol Vis Sci. 61, 14(2020).	Chlamydomonas Channelrhodopsin 2	IHC/IF
Weiglein, A. et al. One-trial learning in larval Drosophila. Learn.Mem. 26, 109-120 (2019)	Chlamydomonas Channelrhodopsin 2	IHC
Wang, Y. et al. Optogenetic Control of Heart Rhythm by Selective Stimulation of Cardiomyocytes Derived from Pnmt + Cells in Murine Heart. Sci. Rep. 7, 1â€“10 (2017).	Chlamydomonas Channelrhodopsin 2	IHC-IF