

Hydroxychloroquine Sulfate

Catalog# / Size	427602 / 100 mg
Regulatory Status	RUO
Other Names	hydroxychloroquine, HCQ, chloroquine
Description	Hydroxychloroquine sulfate is used as an anti-malarial drug in regions where the parasite has grown resistance to chloroquine phosphate. It is a less toxic derivative of chloroquine phosphate that it known to inhibit proinflammatory cytokine levels and is being used as a treatment to decrease inflammation in autoimmune diseases such as rheumatoid arthritis and systemic lupus erythematosus. The drug is also broadly used to study autophagic pathways in eukaryotic cells, where it blocks lysosomal acidification. This decreases autophagic flux by disrupting autophagosome-lysosome fusion. Additionally, hydroxychloroquine sulfate inhibits infection by SARS-CoV-2 and other coronaviruses <i>in vitro</i> .

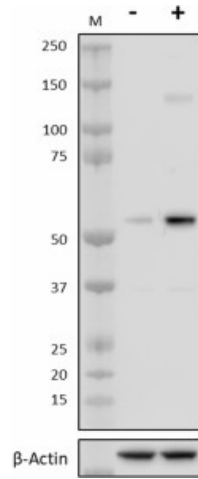
Product Details

Formulation	Lyophilized
Preparation	Resuspend 100 mg of lyophilized hydroxychloroquine sulfate in 4.6 mL of ddH ₂ O to make 50 mM stock concentration.
Storage & Handling	Store lyophilized powder at room temperature under desiccation. Protect from light. Once reconstituted, store at -20°C. Use reconstituted material within 3 months to avoid loss of potency.
Application	Activation - Verified
Recommended Usage	Treatment of cultured cells with hydroxychloroquine sulfate ranges from 10-50 µM for 12-48 hours. It is recommended that the reagent be titrated to determine optimal performance.
Disclaimer	This product is for research use. It is not intended for therapeutic use or human consumption.

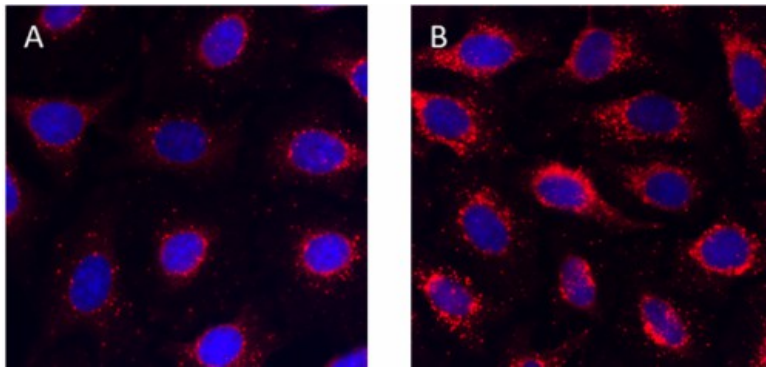
Antigen Details

Biology Area	Cell Biology, COVID-19
Antigen References	<ol style="list-style-type: none">1. Jiang PD, <i>et al.</i> 2010. <i>Biomed. Pharmacother.</i> 64:6092. Frieboes HB, <i>et al.</i> 2014. <i>JOP.</i> 15:189.3. Levy JM, <i>et al.</i> 2014. <i>Cancer Discov.</i> 4:773.4. Wang M, <i>et al.</i> 2020. <i>Cell Res.</i> 30:269.
Gene ID	NA

Product Data



Whole cell extracts (15 μ g protein) from HeLa cells untreated (-) or treated (+) with 50 μ M hydroxychloroquine sulfate for 18 hours were resolved by 4-12% Bis-Tris gel electrophoresis, transferred to a PVDF membrane, and probed with a purified anti-p62 antibody overnight at 4°C. Proteins were visualized by chemiluminescence detection using HRP donkey anti-rabbit IgG antibody (Cat. No. 406401). Direct-Blot™ HRP anti- β -actin antibody (Cat. No. 664804) was used as a loading control at a 1:10000 dilution (lower). Lane M: Molecular weight marker.



HeLa cells were grown in media with 50 μ M (panel B) or without (panel A) hydroxychloroquine sulfate for 18 hour. Cells were then fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.5% Triton X-100 for 10 minutes and blocked with 5% FBS for 60 minutes. Cells were then intracellularly stained with purified anti-p62 antibody overnight at 4°C, followed by incubation with Alexa Fluor® 594 goat anti-mouse IgG antibody (Cat. No. 405326) at 1:200 dilution. Nuclei were counterstained with DAPI and the image was captured with a 60X objective.

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587