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ELISA IL-10

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Protocol status: Working

We use this protocol and it's working

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Keywords: IL-10, multiple sclerosis, ELISA, immunosorbent assay, linked immunosorbent assay, specific mouse monoclonal antibody, immobilized capture antibody, detection monoclonal antibody, antibody, binds to the immobilized capture antibody, antigen, biolegend elisa standard max, remitting multiple sclerosis, ml of peripheral blood, biotinylated mouse monoclonal, effects of photobiomodulation, photobiomodulation, peripheral blood, antibody sandwich, horseradish peroxidase avidin, elisa, microwell absorbance

Abstract

To evaluate the effects of photobiomodulation (PBM) on IL-10 expression in individuals with relapsing-remitting multiple sclerosis, a clinical trial was performed. Participants were randomized and then collected 10 mL of peripheral blood. IL-10 was analyzed by BioLegend ELISA Standard MAX™ kit. This is an enzyme linked immunosorbent assay (ELISA). A human IL-10 specific mouse monoclonal antibody is first coated in a 96-well plate. Standards and samples are added to the wells and IL-10 binds to the immobilized capture antibody. Then, a biotinylated mouse monoclonal IL-10 detection monoclonal antibody is added, producing an "antibody-antigen-antibody sandwich". Horseradish peroxidase avidin is then added, followed by TMB Substrate Solution, producing a blue color in proportion to the concentration of IL-10 present in the sample. Finally, the Stop Solution alters the reaction color from blue to yellow, and the microwell absorbance is read at 450 nm with a microplate reader.

Attachments



[ELISA.docx](#)

15KB

Guidelines

The complete list of reagents and plastic can be found in the 'Materials' section.



Materials

MATERIALS



PBS pH 7.4



ELISA MAX™ Standard Sets **Catalog #430601**



Microwell plates **PENSABIO Catalog #423501**



Coating Buffer **BioLegend Catalog #421701**



Wash Buffer **BioLegend**



TMB Substrate Solution **BioLegend Catalog #421101**



Stop Solution **BioLegend**



Assay Diluent **BioLegend**

