protocols.io

ELISA IL-10

Tamiris Silva[1]

[1]Nove de Julho University

Dec 03, 2019

1 *Works for me*   dx.doi.org/10.17504/protocols.io.92dh8a6

Tamiris Silva ⚡

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 perididase 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.

ELISA.docx

GUIDELINES

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

MATERIALS

NAME	CATALOG #	VENDOR
PBS pH 7.4		
ELISA MAX™ Standard Sets	430601	
Microwell plates	423501	PENSABIO
Coating Buffer	421701	BioLegend
Wash Buffer		BioLegend
TMB Substrate Solution	421101	BioLegend
Stop Solution		BioLegend
Assay Diluent		BioLegend