Detection of anti- Keyhole limpet hemocynin (anti-KLH) in rats by double immunodiffusion (Ouchterlony) technique.

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ABSTRACT

Keyhole limpet hemocyanin (KLH) is a cooper-containing protein comprising of subunits with MW of 400 kDa. This protein is found in the hemolymph of the sea mollusk Megathura crenulata. It has the ability to enhance the host’s immune response by interacting with monocytes, T cells and macrophages. KLH has been used primarily as a carrier for vaccines and antigens [1]. It was found that chicken immunized with KLH bound peptide raised an anti-KLH immunoresponse [2]. This can be tested by a single method such as the Ouchterlony technique.

Reference


DOI
dx.doi.org/10.17504/protocols.io.bjs3kngn

PROTOCOL CITATION


https://dx.doi.org/10.17504/protocols.io.bjs3kngn

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CREATED
Aug 16, 2020

LAST MODIFIED
Aug 16, 2020

PROTOCOL INTEGER ID
40507
Detection of anti-keyhole limpet hemocyanin antibodies in rats by double immunodiffusion is carried out.

Briefly, 1% agarose gels are prepared and wells cut into the gel using a template.

Initially, aliquots of 25 µl each of KLH in concentration of 1 mg/ml are applied to the centre well.

The peripheral wells are filled with 25 µl of rat serum post-immunized with an anti-HIV gp120 vaccine.

The gels are incubated at RT for 48–72 hours.

After that the gels are examined for precipitin lines.

An anti-KLH developed in chickens is included as positive control and turtle serum as a negative control.

The positive results are taken as the presence of precipitin line/s and negative results, the absence of precipitin lines.