

## **RHEUMATOID FACTOR REMOVAL REAGENT**

**CATALOG NUMBER:** RFRR05

**LOT NUMBER:**

**QUANTITY:** 5.0 ml.

**HOST:** Sheep

### **IMMUNIZING ANTIGEN**

Prepared from purified polyclonal IgG from pooled human serum.

### **SPECIFICITY**

The antiserum was specific for IgG when tested against human plasma and purified human immunoglobulins by Coomassie Blue R stained double immunodiffusion and immunoelectrophoresis at antiserum concentrations of 2x and 1/4. Undesired immune reactivity has been removed by solid phase immunoadsorption. Cross reactivity with human IgM is determined by ELISA. Defined as the amount of total antibody which binds to IgM, cross reactivity is less than 0.1%.

### **DESCRIPTION**

Sheep anti-human IgG, designed for the removal of IgM class rheumatoid factors (IgM-RF) from serum and plasma samples prior to testing for specific IgM antibodies in ELISA.

### **PRESENTATION**

Whole serum from which labile components, particularly lipoproteins, have been removed, with 0.1% sodium azide as preservative.

### **PRINCIPLE OF USE**

Rheumatoid factors are IgG or IgM class autoantibodies which may occur in the serum of up to 5% of healthy individuals. IgM class rheumatoid factors (IgM-RF) may lead to false positive results in pathogen specific IgM ELISA. IgM-RF bind IgG, and react preferentially with IgG contained in immune complexes. False positive results may be avoided by the removal of either IgM-RF or IgG from the sample prior to assay.

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Chemicon RFRR05 precipitates up to 15 mg of IgG per ml of undiluted sample. IgM-RF bind to the precipitate, and thus both IgG and IgM-RF are prevented from participating in any subsequent reaction. This minimizes the likelihood of IgM false positive reactions, and also minimizes competition between any pathogen specific IgG and IgM.

## **METHOD FOR USE**

### **1. For use in ELISA applications -**

For a 1:40 final sample dilution:

Dilute RFRR 1:3 in phosphate buffered saline (PBS) pH7.2 eg. 70  $\mu$ l RFRR + 140  $\mu$ l PBS and dilute serum or plasma 1:20 eg. 10  $\mu$ l sample + 190  $\mu$ l PBS. Mix the diluted RFRR and diluted sample together in equal quantities eg. 200 $\mu$ L RFRR + 200 $\mu$ L sample.

or

### **For use in Immunofluorescence -**

For a 1:10 final sample dilution:

Dilute 5 $\mu$ L serum or plasma with 10 $\mu$ L PBS and add 35 $\mu$ L RFRR.

Mix well.

2. Incubate for 15 minutes at room temperature or overnight at 2-8°C.
3. Mix well and further dilute and process according to assay requirements. RFRR is compatible with common diluents containing such agents as Tween 20, skim milk powder and bovine serum albumin.

## **STORAGE**

Store at +2 to +8°C, for up to 6 months in undiluted aliquots.

## **WARNING**

Samples to be tested for specific IgG class antibodies should not be treated with RFRR.

This reagent contains 0.1% sodium azide as preservative. Due to potential hazards arising from the build up of this material in pipes, spent reagent should be disposed of with liberal volumes of water.

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