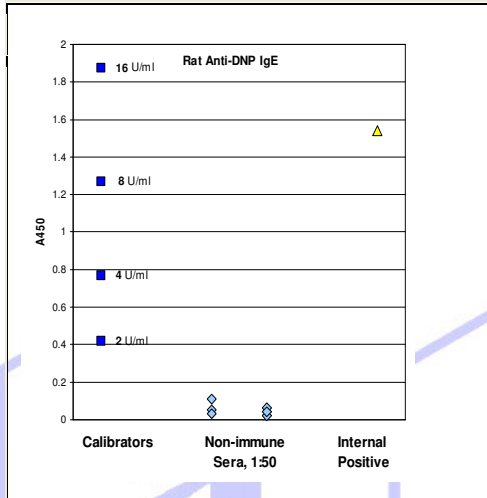


## Rat Anti-DNP IgE ELISA Kit, Cat# 650-120-DGE

For measuring IgE activity specific for dinitrophenol (DNP) hapten in rat serum or plasma.



### Rat Anti-DNP IgE ELISA Kit Features

- DNP-BSA pre-coated, stabilized, ready-to-use 96-well strip plate; shelf life of 6-12 months.
- Multi-level liquid Calibrators [16, 8, 4, 2 U/ml]  
Used to validate assay performance and determine reproducibility between assays; may be used in calculations to normalize between-assay variation to enhance precision.
- 1:50 or greater sample dilution; 100ul samples
- 105 minute, 3 incubation steps at room temp
- Contains all necessary reagents.

For research use only.

**Assay Procedure:** Allow all reagents to reach room temp. Arrange and label required number of strips.

- Step 1.** Pipet **100 ul** each of pre-diluted **Calibrator**, control and sample containing rat anti-DNP (diluted as required) into predetermined wells. Mix gently and incubate at room temperature for **60 min**.
- Step 2.** **Aspirate** and **wash** the plate four times. **Add 100ul** of **Anti-Rat IgE-HRP** conjugate to all wells, mix gently and incubate at room temperature for **30 min**.
- Step 3.** **Aspirate** and **wash** the plate five times. Add **100 ul** of **TMB Substrate** solution to all wells, mix gently, and incubate at room temperature for **15 min**.
- Step 4.** Pipet **100 ul** of **Stop Solution** into each well and mix gently (positive blue color turns yellow). **Measure OD** at **450 nm**. Determine the titer of rat anti-DNP Ig in each sample using the Calibrators as reference.

### General Information

Asthma is a chronic lung disease characterized by airway hyper-responsiveness (AHR) to allergens, airway edema, and increased mucus secretion. Increased levels of circulating Ig antibody and atopy, a propensity to allergic responses, are associated with the development of asthma. With use of animal models of AHR, control of the timing of exposure to the initiating antigen, the use of a defined allergen trigger, and genetic manipulation are likely to enhance the understanding of AHR. Dinitrophenol (DNP) has long been employed as a model immunogen, as a single antigen to reduce the complexity of modeling AHR. DNP-immunization has produced significant variations in the amounts and antibody classes (IgG, IgA, IgE, IgM) among strains, and under various experimental conditions, which may include DNP preparations (purity and supplier), doses (amount per injection), routes (intramuscular, intravenous, aerosol, liposome entrapped, polymerized etc), frequency of exposure (single, multiple injections). DNP-induced antibody production has been used to assess the immune status of normal and immune-compromised or stimulated animals.

### Related ELISA kits

640-200-DGE Mouse anti-DNP IgE ELISA Kit  
 640-220-DGM Mouse anti-DNP IgM ELISA Kit  
 650-100-DGE Rat Anti-DNP IgE ELISA Kit  
 650-120-DGM Rat Anti-DNP IgM ELISA Kit

640-210-DGG Mouse anti-DNP IgG ELISA Kit  
 650-110-DGG Rat Anti-DNP IgG (total) ELISA Kit  
 100608A