

**REFERENCES**

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## Mouse/Rat Prolactin ELISA

Catalog No.: PR063F-100 (96 tests)

**INTENDED USE**

**For Research Use Only. Not for use in diagnostic procedures.**

MATERIALS PROVIDED	96 tests
1. Microwell coated with Prolactin polyclonal antibody	12x8x1
2. Prolactin Standards: 6 vials (ready to use)	0.5ml
3. Biotinylated Antibody reagent (ready to use)	12ml
4. Streptavidin Enzyme Conjugate: 1 bottle (ready to use)	12 ml
5. TMB Substrate: 1 bottle (ready to use)	12ml
6. Stop Solution: 1 bottle (ready to use)	12ml
7. 20X Wash concentrate: 1 bottle	25ml

**MATERIALS NOT PROVIDED**

1. Distilled or deionized water
2. Precision pipettes
3. Disposable pipette tips
4. ELISA reader capable of reading absorbance at 450nm
5. Absorbance paper or paper towel
6. Graph paper

**STORAGE AND STABILITY**

1. Store the kit at 2 - 8° C.
2. Keep microwells sealed in a dry bag with desiccants.
3. The reagents are stable until expiration of the kit.

**WARNINGS AND PRECAUTIONS**

1. For Research Use Only. Not for use in diagnostic procedures.
2. For laboratory use.
3. Do not pipette by mouth. Do not smoke, eat, or drink in the areas in which specimens or kit reagents are handled.
4. The components in this kit are intended for use as an integral unit. The components of different lots should not be mixed.
5. It is recommended that standards, control and serum samples be run in duplicate.
6. Optimal results will be obtained by strict adherence to this protocol. Accurate and precise pipetting, as well as following the exact time and temperature requirements prescribed are essential. Any deviation from this may yield invalid data.

**SPECIMEN COLLECTION HANDLING**

1. Collect blood specimens and separate the plasma immediately.
2. Typically, specimens may be stored refrigerated at (2-8° C) for 5 days. If storage time exceeds 5 days, store frozen at (-20° C) for up to one month.
3. Avoid multiple freeze-thaw cycles.
4. Prior to assay, frozen sera should be completely thawed and mixed well.

**REAGENTS PREPARATION**

Prepare 1X Wash buffer by adding the contents of the bottle (25 ml, 20X) to 475 ml of distilled or deionized water. Store at room temperature (20-25°C).

**ASSAY PROCEDURE**

Prior to assay, allow reagents to stand at room temperature.

Gently mix all reagents before use.

1. Place the desired number of coated strips into the holder
2. Pipet 50 µl of Prolactin standards, control and patient's sera.
3. Add 100 µl of biotin conjugate to all wells. Shake the plate for 10 seconds to mix the solution.
4. Cover the plate and incubate for 60 minutes at room temperature (20-25°C).
5. Remove liquid from all wells. Wash wells three times with 300 µl of 1X wash buffer. Blot on absorbance paper or paper towel.
6. Add 100 µl of streptavidin enzyme conjugate to all wells.
7. Cover the plate and incubate for 30 minutes at room temperature.
8. Remove liquid from all wells. Wash wells three times with 300 µl of 1X wash buffer. Blot on absorbance paper or paper towel.
9. Add 100µl of TMB substrate to all wells
10. Cover plate and incubate for 15 minutes at room temperature.
11. Add 50 µl of stop solution to all wells.
12. Read absorbance on ELISA Reader at 450 nm within 15 minutes after adding the stopping solution.

**CALCULATION OF RESULTS**

The standard curve is constructed as follows:

1. Check prolactin standard values on each standard vial. This value might vary from lot to lot. Make sure you check the value on every kit. See example of the standard attached.
2. To construct the standard curve, plot the absorbance for the standards (vertical axis) versus the standard concentrations (horizontal axis) on a linear graph paper. Draw the best curve through the points.
3. Read the absorbance for controls and each unknown sample from the curve. Record the value for each control or unknown sample.

**Example of a standard curve**

Standard	Conc.(ng/ml)	OD (450 nm)
1	0	0.07
2	3	0.19
3	6	0.36
4	25	0.79
5	100	1.45
6	200	2.01

**LIMITATIONS OF THE Test**

1. The test results obtained using this kit is for research use. It is recommended that each lab establish normal range based on sample population.

2. Do not use sodium azide as preservative. Sodium azide inhibits HRP enzyme activities.