IVD TECHNOLOGIES

Giardia Antigen Test Kit

FOR DETECTION OF GIARDIA ANTIGEN IN STOOL

Product Number: GIAR-1000

Giardia **Ag**

INTENDED USE

The Giardia Antigen Test Kit is used for the detection of Giardia antigen in stool samples.

ANALYTICAL PRINCIPLE

Diluted stool sample with potential Giardia antigen is allowed to bind to Giardia antibody on the surface of the microwell. Unbound antigen is removed by washing. Giardia antibody-HRP conjugate is allowed to bind to any antigen remaining on the microwell. Unbound HRP conjugate is removed by a wash step. TMB is allowed to react with bound HRP conjugate. The reaction is read. Color produced indicates the presence of Giardia antigen.

SPECIMEN REQUIREMENTS

Stool samples are acceptable. Avoid repetitive freezing and thawing of samples.

REAGENTS

Precautions & Safety Notes

- WEAR LATEX GLOVES, FACE SHIELDS AND A LAB COAT WHEN HANDLING SPECIMENS AND OTHER HAZARDOUS REAGENTS
- FOR *IN VITRO* USE, POTENTIAL BIOHAZARDOUS MATERIAL. HANDLE ASSAY REAGENTS AS IF CAPABLE OF TRANSMITTING AN INFECTIOUS AGENT.
- Sample Diluent, Positive Control, Negative Control, and Wash Buffer reagents contain 0.05% ProClin 300. Avoid contact of these reagents with skin or eyes.

Kit Components

ID	Reagent	Part Number	Quantity
	Giardia Antigen Test Kit	**GIAR-1000**	**96 Test**
A	Negative Control [Contains: Sample diluent, 0.05% ProClin 150] Ready to Use	**GIAR - 1001**	**1mL**
B	Positive Control [Contains: Giardia Antigen, 0.05% ProClin 150] Ready to Use	**GIAR - 1002**	**1mL**
C	Giardia Microwell Plate [Contains: Giardia Antibody]	**GIAR - 1003**	**96 Well Plate**
D	HRP Conjugate [Contains: Giardia Antibody-HRP]	**GIAR - 1004**	**10 mL**
SD4	Sample Diluent	**SD-1004**	**2 x 50 mL**
WB	20X Wash Buffer Concentrate [Contains: Tris Buffer, 1% Tween-20, NaCl, 0.05% ProClin 150]	**WBFEA-1003**	**50 mL**
TS	TMB Solution [Contains TMB] Keep away from light	**TMBS-1001**	**10 mL**
SS	Stop Solution [Contains 1N Sulfuric Acid]	**SSFEA-1001**	**10 mL**

MATERIALS

The following materials are required but not supplied.

- Variable Pipettors and Tips
- Centrifuge
- Refrigerator (for kit storage)

PROCEDURE PRECAUTIONS

- Bring reagents to room temperature before use.
- Use clean instruments & equipments.
- Unused microwells should be sealed tightly in the foil pouch until further use. Use laboratory tape to completely seal the pouch after each use.
- Ensure that the bottom surface of the microwells are clean before reading by wiping with low lint non abrasive paper towels.
- Minimize air bubbles in microwells.
- Microwells should not contain liquid after the washing steps. To ensure that liquids are removed from microwells after washing steps, microwells can be tapped against clean paper towels.

REAGENT PREPARATION

1x Wash Buffer Preparation

1. Add 1 unit of volume of 20X Wash Buffer Concentrate (**WB**) to 19 units of volume of DI water. For example, add **50 mL** of 20X Wash Buffer Concentrate (**WB**) to **950 mL** of purified water.
2. Mix the Wash Buffer Preparation well.

SAMPLE PREPARATION

1. Label required glass tubes for sample dilution.
2. Add **700 µL** of Sample Diluent (**SD4**) to tubes.
3. Add **100 – 150 mg** of solid stool or **100 µL** if stool is liquid to designated tubes.
4. Mix well by vortexing tubes for at least 3 seconds.

PROCEDURE

1. Dispense **100 µL** of the diluted samples, Negative Control (**A**), and Positive Control (**B**) into designated wells of the Microwell Plate (**C**).
2. Incubate for **60 minutes** at **room temperature**.
3. Wash each well **3 times** with **300 µL** of the **1X Wash Buffer Preparation**. Tap microwells against clean paper towels to ensure no liquid remains.
4. Dispense **100 µL** or **2 drops** of HRP Conjugate (**D**) to each well.
5. Incubate for **30 minutes** at **room temperature**.
6. Wash each well **3 times** with **300 µL** of the **1X Wash Buffer Preparation**. Tap microwells against clean paper towels to ensure no liquid remains.
7. Dispense **100 µL** or **2 drops** of TMB Solution (**TS**) to each well.
8. Incubate the wells for **15 minutes** at **room temperature** and **protect from light**.
9. Dispense **100 uL** or **2 drops** of Stop Solution (**SS**) to each well.
10. Read result visually or at 450 nm on a microplate reader.

RESULT INTERPRETATION

Visual

Negative: Any sample with yellow color equal or less than the negative control.

Positive: Any sample that is more intensely yellow than the negative control.

Microplate Reader

Read microwells at 450 nm.

Negative: Absorbance reading less than 0.08 OD.

Positive: Absorbance reading of above 0.08 OD.

Manufacturer
Made in the USA

IVD Technologies
2002 S. Grand Avenue, Suite A
Santa Ana, CA 92705 USA
Tel: 1(714)549-5050
Fax: 1(714)549-5055
Email: info@ivdtechnologies.com