



## Fecal Occult Blood

Early Detection and Effective Screening for Colorectal Cancer







### gFOB vs. CTK's iFOB

Colorectal cancer is the third most common type of cancer in both men and women. Early detection of this disease through routine screening of patients age 50 and over can reduce the number of related deaths by 30%. The fecal occult blood (FOB) test is the ideal method to screen for colorectal cancer as well as other gastrointestinal diseases, such as cancer, polyps, colitis, diverticulitis.

Two types of FOB tests are commercially available: Guaiac FOB (gFOB) tests and immunochemical FOB (iFOB) tests. **Aria** iFOB Rapid Tests are designed specifically to detect trace amounts of human fecal occult blood which can indicate early stage colorectal cancer.

**Aria** iFOB tests offer many advantages over the commonly-used but inferior Guaiac method:

Comparison of iFOB and gFOB	Aria FOB Rapid Test	Guaiac Test
Test method	Immunochemical assay	Chemical test
Specificity	>98%, highly specific for human Hb	Poor, detects nonhuman Hb
Sensitivity	Adjustable, as low as 25 ng/mL	> 90,000 ng/mL
Accuracy	> 95%	< 86%
Dietary & Drug Restrictions	NONE	YES, several days
Specimens required	1 required, 2 recommended	3 separate samples
Interpretation	Clear, accurate reading  Negative  Positive	Color change, often difficult to interpret  Negative  Positive

### FEATURES OF IFOB RAPID TESTS BY CTK

- highly sensitive and specific with clear, easy-to-read results
- no dietary restrictions
- only 1 specimen required, 2 recommended
- **Positivia** external FOB assay controls are available to ensure lab compliance



Catalog	Product	Description	Sample	Shelf Life
R2010C	FOB Rapid Test	Detection of FOB at detection sensitivity of 50 ng/mL	Stool	24 month
R2011C	FOB-Hi Rapid Test	Detection of FOB at detection sensitivity of 25 ng/mL	Stool	24 month



Aria RAPID TEST





# Aria FOB Rapid Tests

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## Aria FOB Rapid Test



### Analytical sensitivity

50 ng/mL hHb in buffer or 7 µg/g hHb in feces

### Dose Hook Effect

The **Aria** FOB Rapid Test cassettes do not show any hook effect or prozone effect up to the concentration of 4 mg/mL hHb in buffer

### Clinical Performance

Relative Sensitivity: 97.9%; Relative Specificity: 99.2%  
Overall Agreement: 98.9%

Reference	Aria FOB Rapid Test		Total
	Positive	Negative	
Positive	47	1	48
Negative	1	126	127
Total	48	127	175

## Aria FOB-Hi Rapid Test



### Analytical sensitivity

25 ng/mL hHb in buffer or 3.5 µg/g hHb in feces

### Dose Hook Effect

The **Aria** FOB-Hi Rapid Test cassettes do not show any hook effect or prozone effect up to the concentration of 4 mg/mL hHb in buffer

### Clinical Performance

Relative Sensitivity: 95.8%; Relative Specificity: 98.8%  
Overall Agreement: 97.8%

Reference	Aria FOB-Hi Rapid Test		Total
	Positive	Negative	
Positive	46	2	48
Negative	1	86	87
Total	47	88	135

### Cross-Reactivity

No cross-reactivity was observed on the specimens from the following disease states or special conditions, respectively:

- Chicken Hemoglobin
- Turkey Hemoglobin
- Pig Hemoglobin
- Horse Hemoglobin
- Sheep Hemoglobin
- Fish Hemoglobin
- Rabbit Hemoglobin
- Bovine Hemoglobin
- Goat Hemoglobin

### Simple Procedure



### Interference

The performance of the **Aria** iFOB Rapid Tests are not affected by the following common substances:

- Ascorbic acid.....20 mg/dL
- Bilirubin.....100 mg/dL
- Caffeine.....40 mg/dL
- Dietary iron (Fe<sup>2+</sup>/Fe<sup>3+</sup>).....5 mg/dL
- Glucose.....2,000 mg/dL
- Horseradish Peroxidase.....20 mg/mL

### Fast Results

