

## AccuSpike-IR Product Specification and Analysis Report

Product: 2.0 mL, self-standing, polypropylene microtube containing 100 each, counted by flow-cytometry cell sorting, of *Giardia lamblia*, H3 isolate, cysts and *Cryptosporidium parvum*, Iowa isolate, oocysts suspended in 0.75 mL of a de-ionized water/0.01% Tween 20 solution. AccuSpike-IR is designed for percent recovery determination with matrix (environmental) and reagent water samples by US EPA Methods 1622, 1623, and 1623.1.

Species/genus identification method: Direct immunofluorescence microscopy with genus-specific monoclonal antibodies; also phase microscopy.

Purification method: Cysts and oocysts are purified from feces by sucrose and Percoll density gradient centrifugation.

Quantitation method: Cells enumerated using flow cytometry.

Storage Conditions: 4 C. DO NOT FREEZE.

Inactivation/Sterilization: Gamma irradiation.

**Lot# 138**

**Preparation: 03/28/2023**

**Expiration: 06/23/2023 for *Giardia* & *Cryptosporidium* analysis**

**Expiration: 0718/2023 for *Cryptosporidium* analysis ONLY**

### Calibration Data

Test:	Spike Preparation	Spike Preparation
Organism:	<i>Cryptosporidium</i>	<i>Giardia</i>
Source of Organism:	Experimentally infected mice.	Experimentally infected gerbils.
Organism strain:	CpAZ	H3
Stock suspension lot number:	31423-114	230320
Date cells collected by source:	3/14/23	3/20/23
Date of initial calibration:	3/22/23	3/22/23
Age of cells (in days):	8	2
Storage media:	De-ionized Water/0.01% Tween 20	De-ionized Water/0.01% Tween 20
Storage temperature:	4 C	4 C
Viability (PI) before Irradiation	99.9%	99.2%
Mean of the counts:	100.00	100.30
Standard deviation of the counts:	1.20	0.90
Relative standard deviation:	1.20	0.90

Notes from Sorting Facility:

(1) Mean, standard deviation and relative standard deviation are calculated from a minimum of 12 calibration verification samples per set of 10 standards.

(2) Parasites are evaluated for general quality and intactness under DIC microscopy prior to use.