

Product Information



Leukotriene E₄ Acetylcholinesterase EIA Tracer

Item No. 420410

IMPORTANT

Water used to prepare all EIA reagents and buffers must be deionized and free of trace organic contaminants ('UltraPure'). Use activated carbon filter cartridges or other organic scavengers. Glass distilled water (even if double distilled), HPLC-grade water, and sterile water (for injections) are not adequate for EIA.

Laboratory Procedures

This vial contains lyophilized Leukotriene E₄ Acetylcholinesterase (AChE) Tracer (a covalent conjugate of Leukotriene E₄ and electric eel AChE (EC 3.1.1.7)). For long term storage, we suggest that the tracer be stored as supplied at -20°C; it will be stable for at least one year. Reconstitute a 100 dtn vial with 6 ml EIA Buffer or a 500 dtn vial with 30 ml EIA Buffer (see buffer preparation instructions below). Store the reconstituted tracer at 4°C and use within one week. For your convenience, we have supplied a 20% surplus of tracer.

Buffer Preparation

1. Phosphate Buffer

Prepare a 1.0 M phosphate buffer solution by combining 133 g K₂HPO₄ and 32.15 g KH₂PO₄ and diluting to a total volume of 1.0 liter with UltraPure water. The pH of this solution will be 7.4.

2. EIA Buffer

Combine 100 ml of the phosphate buffer prepared above with 100 mg sodium azide, 23.4 g sodium chloride, 370 mg tetrasodium EDTA hydrate, and 1 g bovine serum albumin (Sigma A7030 or equivalent). Stir at room temperature until completely dissolved and dilute to a total volume of 1.0 liter with UltraPure water. This EIA Buffer may also be purchased from Cayman as a 10X concentrate buffer (Item No. 400060).

3. Wash Buffer

Combine 10 ml of the phosphate buffer prepared above with 0.5 ml Polysorbate 20. Bring to a final volume of 1.0 liter with UltraPure water. This Wash Buffer may also be purchased from Cayman as a 400X concentrate buffer (Item No. 400062).

Suggested Assay Protocol

This tracer has been tested and formulated to work exclusively with ACE™ reagents. This tracer may not perform as described if used with other assay reagents or protocols. The standard curve utilized in this assay should consist of a total of eight points made by 2-fold serial dilutions beginning at 1,000 pg/ml. *NOTE: This is an abbreviated protocol. If you are not familiar with this assay, please contact us for a complete protocol.*

1. Add 100 µl of EIA Buffer to NSB wells and 50 µl to B₀ wells.
2. Add 50 µl of Standard (Item No. 420414) or sample to the appropriate wells.
3. Add 50 µl Tracer to all wells except Blk and TA.
4. Add 50 µl Antiserum (Item No. 420412) to all wells except Blk, TA, and NSB.
5. Incubate overnight at room temperature.
6. Wash the plate five times with Wash Buffer.
7. Add 200 µl Ellman's Reagent to each well.
8. Add 5 µl Tracer to the TA well.
9. Develop for approximately 60-90 minutes (B₀ = 0.3-0.8 AU).
10. Read absorbance at a wavelength between 405 and 420 nm.

	1	2	3	4
A	Blk	S1	S1	1
B	Blk	S2	S2	2
C	NSB	S3	S3	3
D	NSB	S4	S4	4
E	B ₀	S5	S5	5
F	B ₀	S6	S6	6
G	B ₀	S7	S7	7
H	TA	S8	S8	8

Blk-Blank; NSB-Non-specific Binding; B₀-Maximum Binding; TA-Total Activity; S1-S8-Standards; 1-8-Samples

Related Product

For a list of related products please visit: www.caymanchem.com/catalog/420410

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery.**

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Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy** located on our website and in our catalog.

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