

Data sheet AEC coloring system

Cat. No.: CT356
Format: 10-plate
Specificity: Provides the substrate for the ELISPOT assay based on enzymatic staining and performed on PVDF membrane-bottomed plates. The AEC coloring system consists of two items: an AEC (3-amino-9-ethylcarbazole) stock solution and Substrate buffer capsules.

Application: For preparing the AEC substrate solution, the content of one substrate buffer capsule is dissolved in 57 ml demineralized water. After complete dissolution, 43 ml 70% ethanol is added to reach a final concentration of 30% ethanol. 20 ml of this substrate buffer solution is thoroughly mixed with 1320 µl AEC stock solution (toxic: use a fume hood). After mixing, the solution should be clear. This amount is sufficient for 2 96-well ELISPOT plate and should be used within 30 min after preparation. Alternatively, the prepared AEC solution can be stored in aliquots for single use using polypropylene vials at ≤ -20 °C protected from light for 3 months. The remaining substrate buffer can be discarded.

Apply 100 µl/well. Cover the plate and incubate 30 min at room temperature (RT: 20-26 °C) protected from light. Stop the reaction by emptying the plate and thoroughly rinse both sides of the PVDF membrane with demineralized water. Air-dry the plate at RT (protected from light). To prevent bleaching of the red spots, store the plate at a dry place protected from light.

The product should be used in combination with:

- Streptavidin-HRP conjugate (U-CyTech cat. no. CT353)
- 96-well PVDF membrane-bottomed plates (Millipore cat. no. MSIP S4510).

Contents: 7 ml AEC stock solution
 5 Substrate buffer capsules
Sterility: -
Packaging: 8 ml opaque amber polypropylene bottle with amber closure (AEC stock solution)
 27 ml white container with wadless closure (Substrate buffer capsules)
Storage: AEC stock solution:
 The AEC stock solution should be stored at ≤ -20 °C and is stable until the expiry date (indicated on the vial)*. It is strongly recommended to divide the solution into small aliquots for single use in polypropylene vials. These aliquots should be stored protected from light at ≤ -20 °C (stable for at least one year).
 * Avoid exposure to light and air: tightly close the vial after use.
 Avoid contact with polystyrene pipettes and vials.

Substrate buffer capsules:
 The substrate buffer capsules are stable until the expiry date (indicated on the vial) when stored at RT in a moisture-free environment.

General: Do not bring AEC stock solution in contact with polystyrene pipettes, vials, etc.

AEC stock solution: ochre solution.
 Substrate buffer capsules: transparent capsule containing white powder.

Safety: **Warning:**
 AEC (3-Amino-9-ethylcarbazole) stock solution is classified as dangerous according to Regulation (EC) no. 1272/2008 and its amendments.

AEC stock solution:
 Acute toxicity, Oral (Category 4)
 Skin irritation (Category 2)
 Eye irritation (Category 2)
 Carcinogenicity (Category 1A)
 Specific target organ toxicity - single exposure (Category 3)



Hazard statements:

H302: Harmful if swallowed.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H350: May cause cancer

Precaution statements:

P201: Obtain special instructions before use.
P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261: Avoid breathing dust/fume/gas/mist/vapors/sprays.
P280: Wear protective gloves/ protective clothing/eye protection/face protection.
P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352: IF ON SKIN: Wash with plenty of soap and water
P305 + P351 + P338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P308 + P313: IF exposed or concerned: Get medical advice/attention.

The AEC stock solution should be handled only in a chemical fume hood. Use only non-sparking tools and keep away from open flames and hot surfaces.

In case of contact with skin, wash with soap and water and remove contaminated clothing and shoes. Upon ingestion or contact with eyes, rinse mouth (if person is conscious) or eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids. Seek medical advice immediately.

The substrate buffer capsules are not classified as hazardous according to Regulation (EC) no. 1272/2008 and its amendments.

Consult the material safety data sheet (MSDS) for further information regarding hazards and safe handling practices. The MSDS can be found on our website www.ucytech.com/manuals.

