



**Correlation:** A group of 20 sera from 3 to 130 U/L was assayed by this procedure and using a similar commercially available ADA Reagent. Comparison of the data gave following results:

Linear regression equation  $y = 1,0332x + 0,43$   
 Correlation coefficient  $r = 0,9968$

**NOTE**

1. A proportional variation of the reaction volumes does not change the result.
2. We suggest do not mix Reagents from different Production lots.
3. Dilute the sample with activity higher than 150 U/L, with saline solution 1:4; repeat the determination and multiply the result by 4.
4. Very deep attention must be given to interfering substances: certain drugs and other substances are able to influence levels of ADA (see References 2.).

**5. PAY ATTENTION!**

**Applications on routine Analyzers may be totally different from what we developed as manual determination, and also from themselves.**

6. The reagent must be used only for the intended destinations, by expert people and in the due lab. conditions.
  7. The clinical diagnosis cannot be done using the result of only one test, but have to be done integrating different lab. and clinical data.
  8. Use sample fresh, as soon as available.
- DO NOT USE haemolyzed samples, because blood cells have very high concentration of ADA.

**REFERENCES**

1. Textbook of Clinical Chemistry, Ed. by N.W. Tietz, W.B. Saunders Co., Philadelphia (1999).
2. Young D.S. et al., Clin. Chem. 21, 302D (1975).
3. Martinek R.C., Clin. Chem. 9, 620 (1963)
4. Delia S. et al., Clin. Chem. 33, 1675 (1987)

## APPLICATION WITH CSF

**REAGENTS, PREPARATION OF THE WORKING REAGENT**

are the same of the kit, except for the Calibrator. To calibrate with CSF has to be used a particular ADA Calibrator for CSF at low concentration (Cod. ADACSF).

**PREPARATION of ADA CALIBRATOR CSF**

Dilute the content of **one vial with 1 ml** of distilled water (don't use saline or PBS, only dist. water).

Mix kindly till complete dissolution.

Please avoid foaming.

A suggestion could be to aliquote in vials the quantity for each stage of analysis ( a few days); to put the need for the day at 2-8°C for immediate use, to freeze the remaining vials for next days.

Let the reagents reach the working temperature before use.

Close immediately after handling. Incompetent handling will release us from any responsibility.

STABILITY: the diluted \*Calibrator is stable 1 day at 2-8°C in dark place.

2 months a -20°C, fractionated in small volumes.

FREEZE only ONE TIME.

**DO NOT REPEAT FREEZING.**

**CAUTION**

The Calibrator is from human origin and has to be used as a potential transfer of infective pathologies. This product has been tested and found to be negative for HIV, HCV and HBsAg antibodies by an approved method. Because no test method can offer complete assurance that all infectious agents are absent, it is recommended that this product and all the samples be handled as though capable of transmitting infectious disease.

**SAMPLE**

- No haemolyzed fresh CSF.

**PROCEDURE**

- Wavelength: 340 nm (334-365 nm)
- Pathlength: 1 cm
- Reading: against air or Distil. water
- Temperature: 37°C
- Method: kinetic
- Reaction: 5 minutes
- Linearity: till 30 U/L met. UV at 37°C
- Sample/Reagent: 1/4

**Let reagents reach the working temperature before using.**

Pipette into a test tube or cuvette labelled:

S: Sample, ST: Calibrator/Standard :

	S	ST
Working Reagent	1000 µl	1000 µl
Sample	250 µl	---
Calibrator/Standard	---	250 µl

Mix carefully and incubate for 4 minutes at 37°C. Measure the initial absorbances for Calibrator (Ast1) and Sample (As1). Repeat the readings 5 minutes later for Calibrator (Ast2) and Sample (As2).

Calculate the differences of absorbance/5 minutes for  
 Calibrator  $\Delta Ast/ 5min = Ast1 - Ast2$  and  
 Sample  $\Delta As/ 5min = As1 - As2$

**CALCULATION**

Insert the values found in the following formula:

Adenosine Deaminase (U/L 37°C) =  

$$\text{values of ADA Calibrator for CSF} \times \frac{\Delta As/ 5min. \text{ Sample}}{\Delta Ast/ 5min. \text{ Calibrator}}$$

**REFERENCE VALUES**

Not available Reference Values for CSF in literature.

It is advisable that every laboratory determine its normal reference values.

**ADDITIONAL NOTE with CSF**

1. For Calibration in automation we suggest to apply as follows:  
 CAL 1----Distilled water (conc. 0.0)  
 CAL 2---Calibrator for CSF (conc. mentioned in Cod. ADACSF)
2. We suggest don't dilute further the Calibrator for CSF. If absolutely required, REM to dilute the Calibrator for CSF ONLY with distilled water.  
 USE IMMEDIATELY: stability at 2-8°C no more than half an hour.