

Liquid Reagents - ready to use

# PYRIDOXAL-5<sup>-</sup>PHOSPHATE

Single Reagent

Supplementary reagent for quantitative in vitro determination of GOT (AST) and GPT (ALT) in human serum or plasma on photometric systems.

REF	Cont.	
D96361	1 x 4 ml	Single Reagent
D94610	5 x 100 ml	GOT (AST) Reagent
D98616 D94620	5 x 50 ml 5 x 100 ml	GOT (AST) Reagent GPT (ALT) Reagent
D98624	5 x 50 ml	GPT (ALT) Reagent

## **TEST PRINCIPLE**

Pyridoxal-5'-phosphate (PP) functions as coenzyme in amino transfer reactions of aspartate GOT (AST) and alanine GPT (ALT) amino transferases.

Enzymes with bound coenzyme as well as coenzyme deficient apoenzymes may be present in serum. Therefore, addition of PP usually produces a marked increase in amino transferase activity. The increase ranges from zero to 3 or 4 fold and averages approximately 50 % for GOT and approximately 20 % for GPT. The IFCC reference method specifies the addition of PP, in accordance with the principle that all factors affecting the rate of reactions must be optimized. PP liquid reagent is intended for use in the reactivation of apoenzymes of GOT and GPT in serum or plasma, prior to the determination of the activity of these enzymes.

# REAGENT COMPOSITION

COMPONENTS:	FINAL CONCEN	TRATION
Good´s Puffer, pH 9.6 Pyridoxal-5'-Phosphate		mmol/L mmol/L

# **REAGENT PREPARATION**

The Reagent is ready for use.

## **REAGENT STABILITY AND STORAGE**

Conditions:	protect from light
	close immediately after use
Storage:	at 2 – 8°C
Stability:	up to the expiration date

#### After mixing of PP with Reagent 1 (of GOT or GPT):

Stability:	at 15 – 25°C	24 hours
	at 2 – 8°C	6 days

# MANUAL TEST PROCEDURE

Bring reagents and samples to room temperature. Mix 100 parts of R1 (GOT or GPT) with 1 part of Pyridoxale-5-phosphate. Follow instructions for GOT or GPT (Substrate Start only).

**NOTE:** Pyridoxal-5'-phosphate -treated Dialab Control and Calibration Sera will yield higher results.

### WARNINGS AND PRECAUTIONS

Take the necessary precautions for the use of laboratory reagents.

### WASTE MANAGEMENT

Please refer to local legal requirements.

# REFERENCES

- Thomas L. Alanine aminotransferase (ALT), Aspartate aminotransferase (AST). In: Thomas L, editor. Clinical Laboratory Diagnostics. 1<sup>st</sup> ed. Frankfurt: TH-Books Verlagsgesellschaft; 1998. p. 55-65.
- Klauke R, Schmidt L, Lorentz K. Recommendations for carrying out standard ECCLS procedures (1988) for the catalytic concentrations of creatine kinase, aspartate aminotransferase, alanine aminotransferase and gamma-glutamyltransferase at 37°C. Standardization Committee of the German Society for Clinical Chemistry, Enzyme Working Group of the German Society for Clinical Chemistry. Eur J Clin Chem Clin Biochem 1993;31:901-9.

2°C





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