

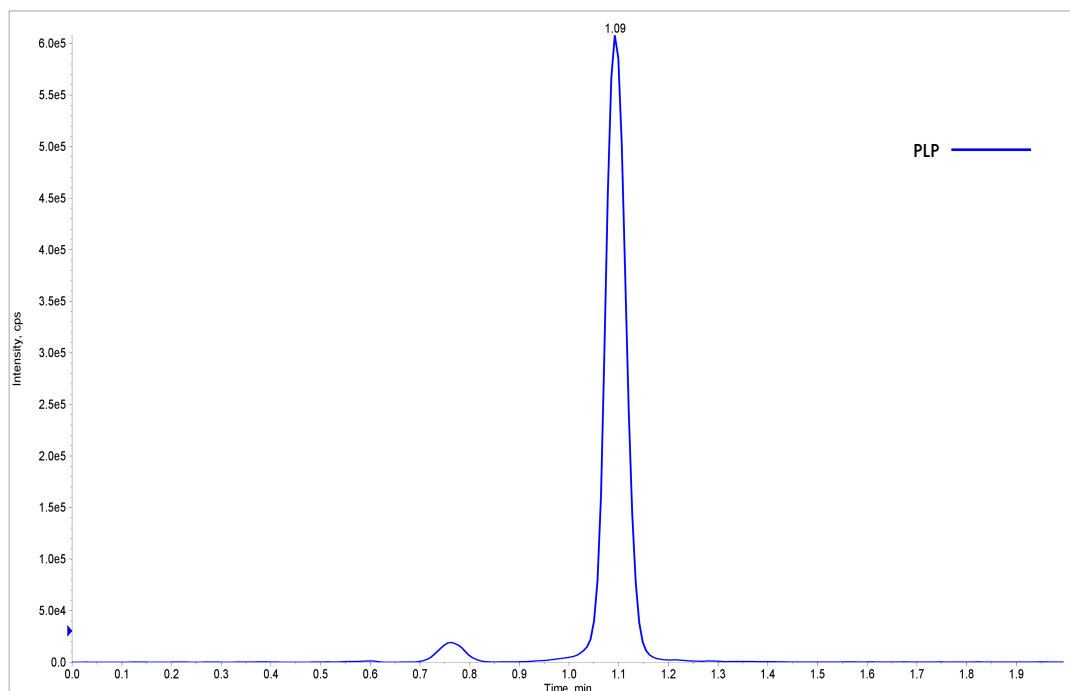
## FLOMASS<sup>®</sup> VITAMIN B6 IN SERUM/PLASMA

Vitamin B6 is a cofactor of more than 100 enzymes involved in many biological processes.

Vitamin B6 is also very important for the normal cognitive function and for the reduction of coronary diseases among elderly people. Malnutrition, alcoholism or chronic renal failure may lead to low level of Vitamin B6. Vitamin B6 supplementation reduces diabetic complication and the incidence of neurodegenerative diseases. Some studies have reported a Vitamin B6 antioxidant activity also.

At plasma level, Vitamin B6 has three forms: Pyridoxal-5-Phosphate (PLP), Pyridoxal (PL) and Pyridoxic Acid (PA). PLP is the only biologically active form in human body. The amount of Vitamin B6 is measured as PLP concentration in plasma or in whole blood.

The dosage of plasmatic PLP is evaluated the most considerable marker for Vitamin B6 status in the tissue because reveals PLP concentration in the liver.



## HPLC-MS/MS system conditions

**Ionization:** ESI positive mode

**MS/MS:** specific MRM

**Injection volume:** 20  $\mu$ L (variable according to instrumental sensitivity)

**Running time:** 5 min

**Column heater:** 30°C

**Column conditioning:** column should be conditioned for 5 min at chromatographic gradient initial condition. Then run 3 blank injections (MPA only) using the gradient as indicated in IFU

## Sample preparation

- Pipette 100  $\mu$ L of serum/plasma in a vial
- According to the number of samples, prepare a mix of 45  $\mu$ L of distilled water + 45  $\mu$ L of Solution 1 Precipitant + 10  $\mu$ L of Internal Standard
- Add 100  $\mu$ L of the Mix Solution obtained in the previous step of the procedure
- Vortex, then centrifuge for 10 min at 12000 rpm
- Transfer 100  $\mu$ L of supernatant in a plastic vial with low volume insert
- Add 100  $\mu$ L of Solution 2 Diluent into vials and vortex
- Analyze with HPLC-MS/MS technique

## Performance

ANALYTE	LINEARITY (ng/mL)	LLOD (ng/mL)	LLOQ (ng/mL)	CV% INTRA	CV% INTER
PLP	0.31 – 100.00	0.09	0.31	3.66 – 8.27	8.93 – 12.98

## Ordering guide

EUM05200	FloMass® Drugs of Abuse in Urine	100 assays
EUM05041	5-Levels Calibrators, lyophil.	2 x 5 x 1.0 mL
EUM05051	2-Levels Controls, lyophil.	2 x 2 x 1.0 mL
EUM00C05	Chromatographic Column	1 pc