

Product datasheet

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ARG83378 Pyrophosphate Assay Kit

Package: 100 assay Store at: -20°C, -80°C

Summary

Product Description ARG83378 Pyrophosphate Assay Kit is an Assay kit for the quantification of Pyrophosphate in Serum,

Plasma, Saliva, Urine and Cell / Tissue lysates

Tested Reactivity Other

Tested Application FuncSt

Target Name Pyrophosphate

Conjugation Un-conjugated

Conjugation Note Read at 590 nm.

Sensitivity 2.5 μM

Sample Type Serum, Plasma, Saliva, Urine and Cell / Tissue lysates

Standard Range $3.91 - 125 \mu M$

Sample Volume 50 µL

Application Instructions

Assay Time ~30 min

Properties

Form Liquid

Storage instruction Store components at -20°C and -80°C. Do not expose test reagents to heat, sun or strong light during

storage and usage. Please refer to the product user manual for detail temperatures of the components.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Background Pyrophosphate is a potent inhibitor of calcium-phosphate crystal formation and growth. Extracellular

pyrophosphate is produced upon ATP hydrolysis by the enzyme ectonucleotide

pyrophosphatase/phosphodiesterase 1 (eNPP1). Pyrophosphate is degraded to phosphate by tissue-nonspecific alkaline phosphatase (TNAP), promoting calcification. Another enzyme, ectonucleoside triphosphate diphosphohydrolase 1 (eNTPD1), can hydrolyze ATP and ADP to phosphate, reducing the

availability of ATP for pyrophosphate production and likely inducing calcification.

Function The anion P2O7 is abbreviated PPi, standing for inorganic pyrophosphate. It is formed by the hydrolysis

of ATP into AMP in cells.

Research Area Pyrophosphates, Anions, Dietary minerals, Molecular biology, Nucleotides, E-number additives