

# ARG81296 ALP / Alkaline Phosphatase Assay Kit

Package: 250 tests Store at: 4°C, -20°C

| Summary             |   |
|---------------------|---|
| Product Description | ARG81296 ALP / Alkaline Phosphatase Assay Kit is a detection kit for the quantification of ALP / Alkaline Phosphatase activity in serum and plasma.   |
| Tested Reactivity   | Hu, Ms, Rat, Mamm   |
| Tested Application  | FuncSt  |
| Specificity         | p-nitrophenyl phosphate that is hydrolyzed by ALP into p-nitrophenol and seen as a yellow colored product and could be detect at 405 nm. This ALP activity kit measurement the color change at O.D. 405 nm for ALP activity analysis. |
| Target Name         | ALP / Alkaline Phosphatase  |
| Conjugation Note    | Read at 405 nm.   |
| Sensitivity         | 2 U/I   |
| Detection Range     | 5 μl serum or plasma sample: 2 - 800 U/I  |
| Sample Type         | Serum and plasma.   |
| Sample Volume       | 5 - 50 μl   |
| Alternate Names     | TNSALP; HOPS; EC 3.1.3.1; Alkaline phosphatase, tissue-nonspecific isozyme; TNAP; Alkaline phosphatase liver/bone/kidney isozyme; APTNAP; AP-TNAP   |

### **Application Instructions**

| Application Note | Please note that this kit does not include a microplate. |
|------------------|--|
| Assay Time       | < 10 min   |

### Properties

| Form                | Liquid  |
|---------------------|---|
| Storage instruction | Store components at 4°C or -20°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

| Gene Symbol    | ALPL  |
|----------------|---|
| Gene Full Name | alkaline phosphatase, liver/bone/kidney   |
| Background     | There are at least four distinct but related alkaline phosphatases: intestinal, placental, placental-like,<br>and liver/bone/kidney (tissue non-specific). The first three are located together on chromosome 2,<br>while the tissue non-specific form is located on chromosome 1. The product of this gene is a membrane<br>bound glycosylated enzyme that is not expressed in any particular tissue and is, therefore, referred to<br>as the tissue-nonspecific form of the enzyme. The exact physiological function of the alkaline<br>phosphatases is not known. A proposed function of this form of the enzyme is matrix mineralization; |

however, mice that lack a functional form of this enzyme show normal skeletal development. This enzyme has been linked directly to hypophosphatasia, a disorder that is characterized by hypercalcemia and includes skeletal defects. The character of this disorder can vary, however, depending on the specific mutation since this determines age of onset and severity of symptoms. Alternatively spliced transcript variants have been described. [provided by RefSeq, Apr 2010]

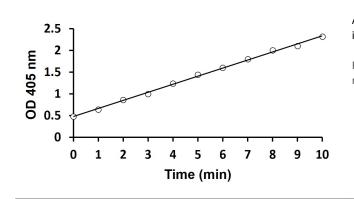
Function

PTM

This isozyme may play a role in skeletal mineralization. [UniProt]

N-glycosylated.

#### Images



ARG81296 ALP / Alkaline Phosphatase Assay Kit functional study image

Functional study: ARG81296 ALP / Alkaline Phosphatase Assay Kit results of a typical example of ALP activity reading at 405 nm.