# General ATP/Adenosine triphosphate ELISA Kit

E45K00782

**Catalog Number:**E45K00782

**Species Reactivity:**General

**Storage:**Store at +4°C. Please refer to protocols.

**Cite ID#:**EN5521232

**Type:**General ELISA Kits

**Description:**General ATP/Adenosine triphosphate ELISA Kit is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit designed for the quantitative measurement of ATP in biological samples. Our rigorously validated, ready-to-go General ATP/Adenosine triphosphate ELISA Kit use a simple protocol that easily integrates into your current processes, allowing you to rapidly and accurately detect ATP in your samples. Appropriate sample types may include Cell Culture Supernates, Serum, Platelet-poor EDTA Plasma, Platelet-poor Heparin Plasma, Urine. Precision Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested several times on one plate to assess intra-assay precision. Inter-Assay Precision (Precision between assays): Three samples of known concentration were tested in several separate assays to assess inter-assay precision. Assays were performed by at least two technicians using two lots of components.

**Assay type:**Competitive

**Detection principle:**Spectrophotometrical

**Sample type:**This immunoassay kit allows for the in vitro quantitative determination in Serum, plasma, tissue homogenates, cell culture supernates and other biological fluids.

**Sensitivity:**0.35 ng/ml

**Assay range:**1.56-100 ng/ml

**Kit components:**Assay Plate, Standard, Sample Diluent, Assay Diluent A&B, Detection Reagent A&B, Wash Buffer, Substrate, Stop Solution.

**Other reagents required:**Deionized or distilled water

**Gene Name:**ATP

**Function:**Adenosine-5'-triphosphate (ATP) is a multifunctional nucleoside triphosphate used in cells as a coenzyme. It is often called the "molecular unit of currency" of intracellular energy transfer. ATP transports chemical energy within cells for metabolism. It is one of the end products of photophosphorylation and cellular respiration and used by enzymes and

structural proteins in many cellular processes, including biosynthetic reactions, motility, and cell division. One molecule of ATP contains three phosphate groups, and it is produced by ATP synthase from inorganic phosphate and adenosine diphosphate (ADP) or adenosine monophosphate (AMP). The three main ways of ATP synthesis is substrate level phosphorylation and oxidative phosphorylation in cellular respiration, and photophosphorylation in photosynthesis.

**Form:**ELISA Kits