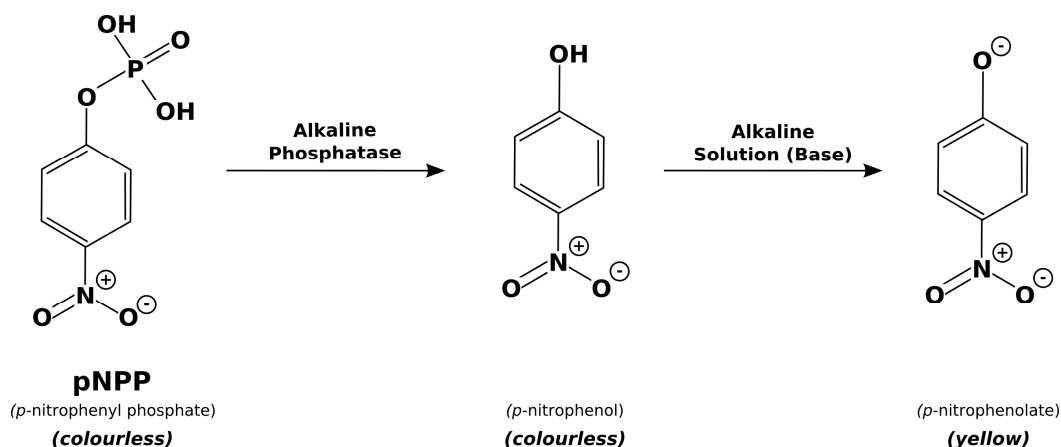


## SEAP – Secreted Alkaline Phosphatase assay Kit - Results

OZ Biosciences is delighted to announce the launching of new SEAP – Secreted Alkaline Phosphatase assay Kit. **This kit is an accurate staining kit for the measurement of Secreted Embryonic Alkaline Phosphatase activity.**

The SEAP – Secreted Alkaline Phosphatase assay Kit is a colorimetric assay for sensitive quantification of SEAP in culture medium from transfected cells. Alkaline phosphatase cleaves the colorless substrate 4-nitrophenylphosphate (PNPP) forming the yellow product p-nitrophenolate in alkaline solutions.



**Secreted alkaline phosphatase catalyses the hydrolysis of pNitrophenyl phosphate (pNPP) producing a yellow product under alkaline conditions**

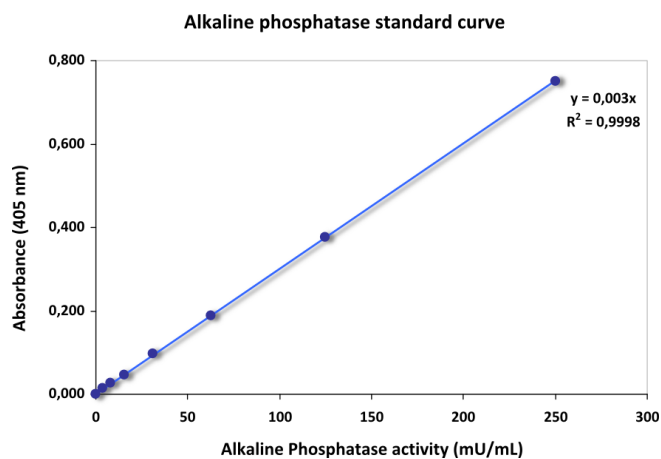
The SEAP enzyme is secreted in the culture medium which allows the assay to be performed on small samples of cell supernatants. In that way, transfected cells are not hampered by the read out procedure and the same cultures can be repeatedly used for kinetics experiments.

The SEAP enzyme presents an extreme heat stability and resistance to phosphatase inhibitor L-homoarginine. Endogenous alkaline phosphatase activity in transfected cells can be minimized by pretreatment of sample at 65°C.

Main **SEAP – Secreted Alkaline Phosphatase assay Kit** features are:

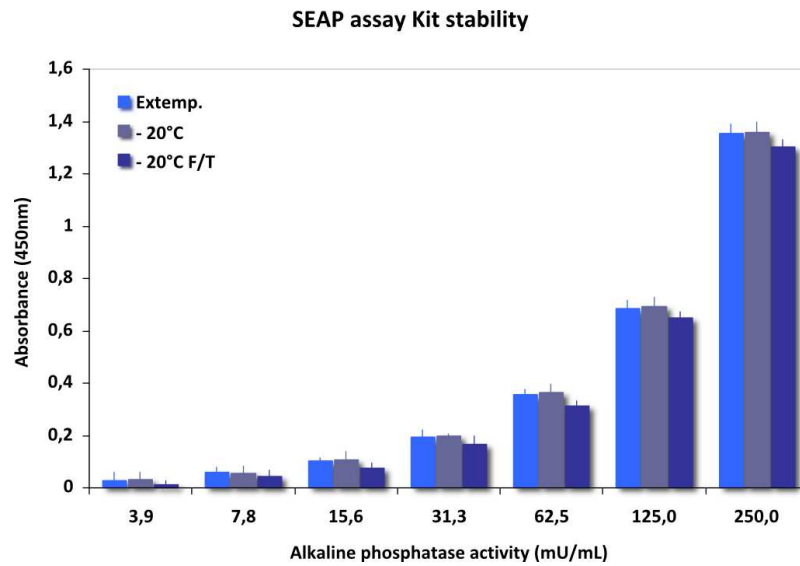
1. Easy and Economical
2. Fast and Accurate
3. Stable under storage conditions

### Assay Sensitivity – Standard curve



Alkaline phosphatase standard curve. A serial two-fold dilution of Alkaline phosphatase standard was prepared and the absorbance was measured at 405 nm.

## Assay Stability – Storage conditions



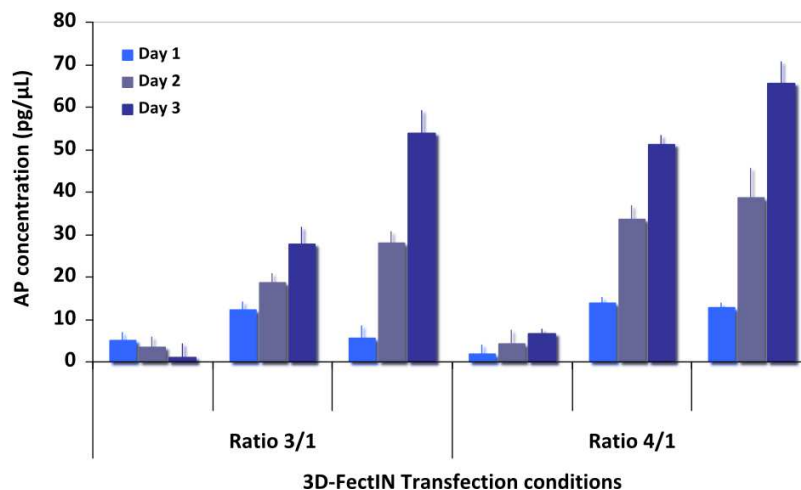
A serial two-fold dilution Alkaline phosphatase standard curve was prepared and the enzyme activity was measured using freshly prepared SEAP assay kit (Extemp.), SEAP assay kit stored under recommended storage conditions (-20°C) or SEAP assay Kit frozen and thawed 5 times. Absorbance was measured at 405 nm with a spectrophotometer.

Absorbance read was identical between freshly prepared and ideally the -20°C stored SEAP assay Kit.

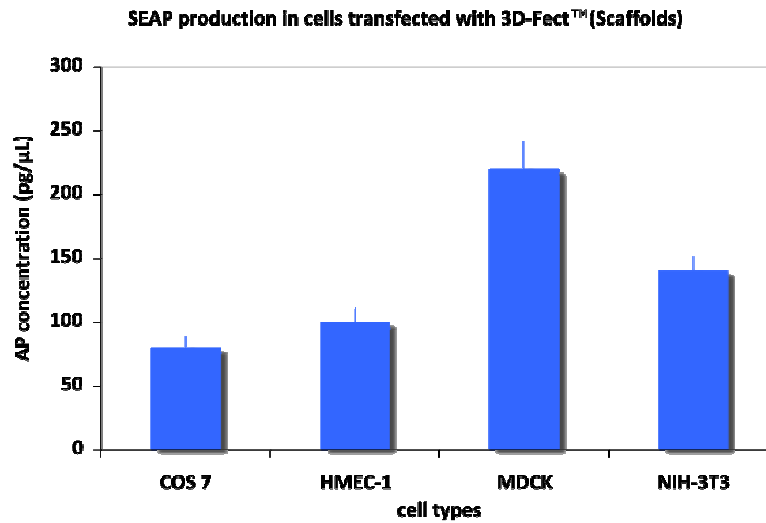
## Sample Data – SEAP – Secreted Alkaline Phosphatase assay Kit

Results presented below show an example of typical data analysis obtained with this assay. For more information on these data please refer to 3D-Fect™ and 3D-FectIN™ transfection reagents (OZBiosciences).

**Kinetics of SEAP production in cells transfected with 3D-FectIN™ (Collagen hydrogel)**



The SEAP – Secreted Alkaline Phosphatase assay Kit was used to measure the SEAP produced in cells transfected with 3D-FectIN™ in collagen-based hydrogel. Complexes of pVectOZ-SEAP and 3D-FectIN were formed and mixed with hydrogel. After polymerization, cells were added. Supernatants were tested for SEAP production 24, 48 and 72 H after transfection using the SEAP assay Kit. Absorbance was read at 405 nm.



The SEAP – Secreted Alkaline Phosphatase assay Kit was used to measure the SEAP produced in cells transfected with 3D-Fect™ on 3D-Scaffolds. Complexes of pVectOZ-SEAP and 3D-Fect were formed and allowed to adhere on collagen-based 3D scaffold before seeding of the cells. 48 H after 3D transfection, supernatants were tested for SEAP production using the SEAP assay Kit. Absorbance was read at 405 nm.

**Bibliographic references**

Please consult our list of references available on the website: [www.ozbiosciences.com](http://www.ozbiosciences.com).