# abcam

#### Product datasheet

# PGF2 alpha High Sensitivity ELISA Kit ab133056

2 References 1 Image

Overview

**Product name** 

PGF2 alpha High Sensitivity ELISA Kit

**Detection method** 

**Precision** 

Colorimetric

Sample	n	Mean	SD	CV%
107.5pmol/ml	24			6.53%
33.79pmol/ml	24			4.94%
11.5pmol/ml	24			7.16%

Inter-assay

Intra-assay

Sample	n	Mean	SD	CV%
117.8pmol/ml				10.97%
35.81pmol/ml				8.88%
10.1pmol/ml				10.14%

Sample type

Cell culture supernatant, Saliva, Milk, Urine, Serum, Plasma

Assay type

Competitive

Sensitivity

0.98 pg/ml

Range

1.95 pg/ml - 2000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Saliva	103.5	% - %
Urine	107	% - %
Serum	100.3	% - %

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Sample type	Average %	Range
Plasma	96.9	% - %

Assay time

**Assay duration** 

**Species reactivity** 

**Product overview** 

**Notes** 

2h 00m

Multiple steps standard assay

**Predicted to work with:** a wide range of other species



Abcam's PGF<sub>2q</sub> High Sensitivity in vitro competitive ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the accurate quantitative measurement of PGF<sub>2q</sub> in milk, culture supernatants, saliva, urine, serum and plasma.

A donkey anti-sheep IgG antibody has been precoated onto 96-well plates. Standards or test samples are added to the wells, along with an alkaline phosphatase (AP) conjugated-PGF<sub>2a</sub> antigen and a polyclonal sheep antibody specific to  $PGF_{2\alpha}$ . After incubation the excess reagents are washed away, pNpp substrate is added and after a short incubation the enzyme reaction is stopped and the yellow color generated is read at 405 nm. The intensity of the yellow coloration is inversely proportional to the amount of  $PGF_{2\alpha}$  captured in the plate.

Prostaglandin  $F_{2\alpha}$  (PGF $_{2\alpha}$ ) is formed in a variety of cells from PGH $_2$ , which itself is synthesized from arachidonic acid by the enzyme prostaglandin synthetase.  $PGF_{2\alpha}$  is often viewed as an antagonist to  $PGE_2$  due to their opposing effects on various tissues.  $PGF_{2\alpha}$  is a potent bronchoconstrictor and has been implicated in asthma attacks. PGF<sub>2a</sub> is also involved in reproductive functions including corpus luteum regulation, uterine contractions, and sperm motility. This has led to its use in terminating pregnancies and inducing labor at term. High levels of PGF $_{2\alpha}$ have also been associated with preeclampsia.

Compound	Cross Reactivity
$PGF_{2\alpha}$	100%
$PGF_{1\alpha}$	11.82%
PGD <sub>2</sub>	3.62%
6-keto-PGF <sub>1α</sub>	1.38%
PGl <sub>2</sub>	1.25%
PGE <sub>2</sub>	0.77%
Thromboxane B <sub>2</sub>	0.77%
8-iso PGF <sub>2α</sub>	0.73%

PGE <sub>1</sub>	0.39%
PGA <sub>2</sub>	<0.1%
6, 15-keto-13, 14-dihydro-PGF $_{1\alpha}$	<0.01%
2-Arachidonoylglycerol	<0.01%
Anandamide	<0.01%

**Platform** 

Microplate

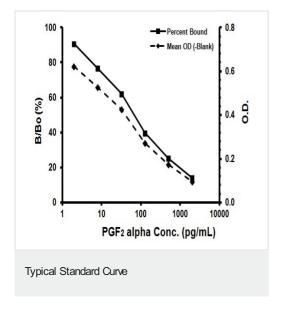
### **Properties**

Storage instructions

Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
20X Wash Buffer Concentrate	1 x 27ml
Assay Buffer	1 x 27ml
Donkey anti-sheep lgG Microplate (12 x 8 wells)	1 unit
PGF <sub>2α</sub> Alkaline Phosphatase Conjugate	1 x 2.5ml
PGF <sub>2α</sub> Antibody	1 x 2.5ml
PGF <sub>2α</sub> Standard	1 x 0.5ml
Plate Sealer	1 unit
pNpp Substrate	1 x 20ml
Stop Solution	1 x 5ml

## Images



Representative Standard Curve using ab133056.

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