

15-deoxy-delta12,14-PGJ2 ELISA Kit ab133031

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Overview

Product name 15-deoxy-delta12,14-PGJ2 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Low	16	1136pg/ml		5.6%
Medium	16	3062pg/ml		5.7%
High	16	4394pg/ml		7.4%

Inter-assay

Sample	n	Mean	SD	CV%
Low	8	1195pg/ml		15.7%
Medium	8	4406pg/ml		13%
High	8	7219pg/ml		14.5%

Sample type Cell culture supernatant, Saliva, Urine, Plasma

Assay type Competitive

Sensitivity 36.8 pg/ml

Range 195 pg/ml - 200000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Saliva	94.4	% - %
Urine	113.9	% - %
Plasma	105	% - %

Sample type	Average %	Range
Tissue Culture Media	97.4	% - %

#### Assay time

5h 0m

#### Assay duration

Multiple steps standard assay

#### Species reactivity

**Reacts with:** Human, Pig, a wide range of other species

#### Product overview

Abcam's 15-deoxy-delta<sup>12,14</sup>-PGJ<sub>2</sub> *in vitro* competitive ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the accurate quantitative measurement of 15-deoxy-delta<sup>12,14</sup>-PGJ<sub>2</sub> in tissue culture media, saliva, urine, and plasma from a wide range of species.

A goat anti-rabbit 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-15-deoxy-delta<sup>12,14</sup>-PGJ<sub>2</sub> antigen and a polyclonal rabbit antibody specific to 15-deoxy-delta<sup>12,14</sup>-PGJ<sub>2</sub>.

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 15-deoxy-delta<sup>12,14</sup>-PGJ<sub>2</sub> captured in the plate.

#### Notes

15-deoxy-Δ<sup>12,14</sup>-PGJ<sub>2</sub> is one of the ultimate dehydration products of PGD<sub>2</sub>. PGD<sub>2</sub> is formed from PGH<sub>2</sub> which itself is synthesized from arachidonic acid by the enzyme prostaglandin synthase. In the aqueous solution PGD<sub>2</sub> forms PGJ<sub>2</sub>. Albumin or other serum proteins present in the sample will convert PGD<sub>2</sub> to the isomeric compound, Δ<sup>12</sup>-PGJ<sub>2</sub>. In males about 152 ng of Δ<sup>12</sup>-PGJ<sub>2</sub> is excreted in urine per day, and in women about half this amount is excreted. 15-deoxy-Δ<sup>12,14</sup>-PGJ<sub>2</sub> has been shown as an inducer of adipogenesis and an activator of the γ isoform of the peroxisome proliferation activated receptor (PPARγ).

#### Cross Reactivity

Compound	Cross Reactivity
15-deoxy-Δ <sup>12,14</sup> -PGJ <sub>2</sub>	100%
PGJ <sub>2</sub>	49.2%
Δ <sup>12</sup> -PGJ <sub>2</sub>	5.99%
PGD <sub>2</sub>	4.92%
Arachidonic Acid	0.03%
PGE <sub>2</sub>	<0.01%
PGF <sub>2α</sub>	<0.01%

9 $\alpha$ ,11 $\beta$ -PGF <sub>2<math>\alpha</math></sub>	<0.01%
Thromboxane B <sub>2</sub>	<0.01%
2-Arachidonoylglycerol	<0.01%
Anandamide	<0.01%

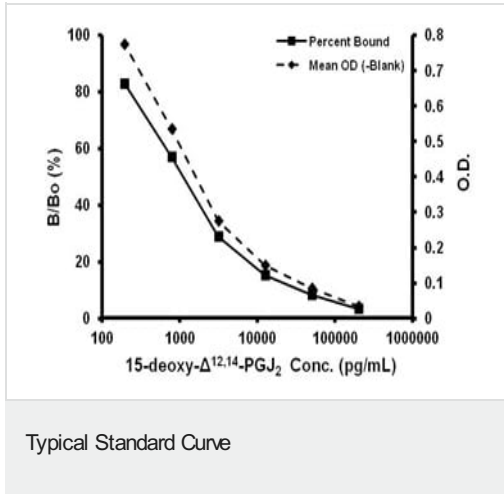
**Platform** Microplate

## Properties

**Storage instructions** Please refer to protocols.

Components	1 x 96 tests
15-d-PGJ <sub>2</sub> Alkaline Phosphatase Conjugate	1 x 5ml
15-d-PGJ <sub>2</sub> Standard	1 x 0.5ml
20X Wash Buffer Concentrate	1 x 27ml
Anti-15-d-PGJ <sub>2</sub> Antibody	1 x 5ml
Assay Buffer	1 x 27ml
Goat anti-rabbit IgG Microplate (12 x 8 wells)	1 unit
Plate Sealer	2 units
pNpp Substrate	1 x 20ml
Stop Solution	1 x 5ml

## Images



Representative Standard Curve using ab133031.

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