

ARBOR ASSAYS™  
Interactive Assay Solutions™

**ISWE**

**Testosterone  
Mini-Kit**

Catalog Number ISWE001

Species Independent

Official Supplier  
to ISWE



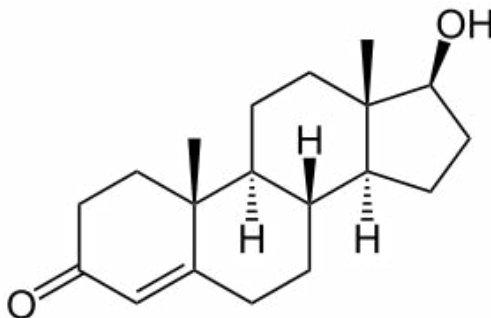
Please read this insert completely prior to using the product.  
For research use only. Not for use in diagnostic procedures.

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**ISWE001 WEB 230727**

## MINI-KIT PRINCIPLE

The ISWE Testosterone Mini-Kit is specifically designed to measure Testosterone and/or its metabolites present in a variety of samples and species for wildlife conservation. The end user must provide or coat their own anti-rabbit IgG secondary antibody coated plates, in addition to providing assay buffer, wash buffer, substrate and stop solution. On page 3, there is a list of Related Materials we supply that are used in our kits.



Three materials are supplied in the ISWE-Kit:

1. The ISWE Testosterone rabbit antibody, developed and owned by ISWE, was raised to the 3-CMO derivative of testosterone. The antibody has been titered and diluted in a buffer containing protein, detergents and Kathon preservative (see below) to ensure its stability. It is at a nominal "50X" concentration\*.

**NOTE:** The 50X Concentrate Rabbit Antibody to Testosterone cannot be directly coated onto plates for EIA use. It is unpurified serum diluted in a buffer containing proteins and detergents. The antibody **WILL NOT** bind to uncoated microtiter plates effectively as the antiserum proteins and the dilution buffer both contain high concentrations of non-specific proteins that will coat any plate surface.

2. The ISWE Testosterone-Peroxidase conjugate is synthesized from 3-CMO derivative of testosterone and has been diluted in a stabilizing solution (see below) to ensure long term stability. It is at a nominal "50X" concentration\*.
3. The Testosterone Standard is synthetic steroid in a stabilizing solution containing buffer and organic solvent. It is supplied at 1,000 ng/mL for dilution into the assay buffer used for your assay.

\* The nominal "50X Concentration" the ISWE Antibody and Conjugate are QC tested using Arbor Assays Testosterone EIA kit reagents from K032-H1 and K032-H5. The ISWE Antibody was diluted in Assay Buffer, X065, at 1:50 and the ISWE Conjugate diluted in Conjugate Diluent, X076, at 1:50 The assay utilized 50 uL sample, 25 uL antibody and 25 uL conjugate added to goat anti-rabbit IgG coated plates, X016-1EA. Assay incubation time was 2 hours shaking, at room temperature, followed by washing and addition of 100 uL of TMB Substrate. After 30 minutes the substrate reaction was stopped by addition of 50 uL of Stop Solution. The color was read at 450 nm.

## SUPPLIED COMPONENTS

### ISWE Testosterone Antibody Concentrate

A 50X Concentrate rabbit polyclonal antibody specific for testosterone diluted in a buffer with proteins, detergents and preservatives.

6 mL

Catalog Number C196-6ML

### ISWE Testosterone Conjugate Concentrate

A 50X Concentrate testosterone-peroxidase conjugate in a special stabilizing solution.

6 mL

Catalog Number C197-6ML

### Testosterone Standard

Testosterone at 1,000 ng/mL in a special stabilizing solution.

1 mL

Catalog Number C198-1ML

## STORAGE INSTRUCTIONS

All components of this kit should be aliquoted into vials upon first thaw. Avoid repeated freeze thaw cycles. Store at -20°C until the expiration date of the kit.

## RELATED MATERIALS

Description	Catalog No.
Goat anti-Rabbit IgG ISWE Plate Coating Accessory Kit	ISWE005
Assay Development ISWE Accessory Kit	ISWE006
Goat anti-Rabbit IgG Coated Plate	X016-1EA
Assay Buffer 5x Concentrate	X065-110ML
HRP Conjugate Diluent	X076-300ML
Wash Buffer 20x Concentrate	X007-125ML
TMB Substrate	X019-55ML
Stop Solution	X020-25ML
Dissociation Reagent	X017-5ML/-25ML
Kathon Preservative	X129-25ML
Plate Coating Buffer 20x Concentrate	X108-100ML
Blocking Buffer 10x Concentrate	X109-250ML
Goat Anti-Rabbit IgG, Affinity Purified	A009-10MG
Goat Anti-Rabbit IgG, Affinity Purified	A009-25MG
Arbor Assays ISWE Plate Coating Course	Contact us for details

## PRECAUTIONS

**The testosterone standard used for this kit is an anabolic steroid and may have a number of known and unknown biological actions. Care should be taken in handling this material.**

This kit utilizes a peroxidase-based readout system. Buffers, including other manufacturers' Wash Buffers, containing sodium azide will inhibit color production from the enzyme. Make sure **all** buffers used for samples are **azide free**.

## PROTOCOLS

**Please Note: The dilution of the ISWE Mini-Kit antibody and conjugate are such that when diluted 1:50 fold in Assay Buffer and Conjugate Diluent and added to an Arbor Assays antibody coated plate, using 100  $\mu$ L of sample or standards, 50  $\mu$ L of conjugate and 50  $\mu$ L of antibody in a 2 hour room temperature incubation with shaking (we recommend shaking around 700–900 rpm) followed by TMB as substrate, these reagents will generate about 1.0 OD at 450 nm. YOUR RESULTS MAY VARY DEPENDING ON A NUMBER OF VARIABLES.**

The rabbit anti-testosterone is supplied at a 50X concentration. An aliquot should be brought to room temperature and diluted one part with 49 parts of a suitable assay buffer. If your assay buffer has protein, detergent and a preservative in it, the diluted antibody will be stable for greater than 1 month at 4°C. Please see Related Materials on page 3 for a suitable Assay Buffer.

The testosterone-HRP conjugate is supplied at a 50X concentration. An aliquot should be brought to room temperature and diluted one part with 49 parts of a suitable diluent or assay buffer. If you wish to store the diluted conjugate for greater than 1 month at 4°C you should dilute it in a suitable conjugate diluent. Please see Related Materials on page 3 for a suitable Conjugate Diluent.

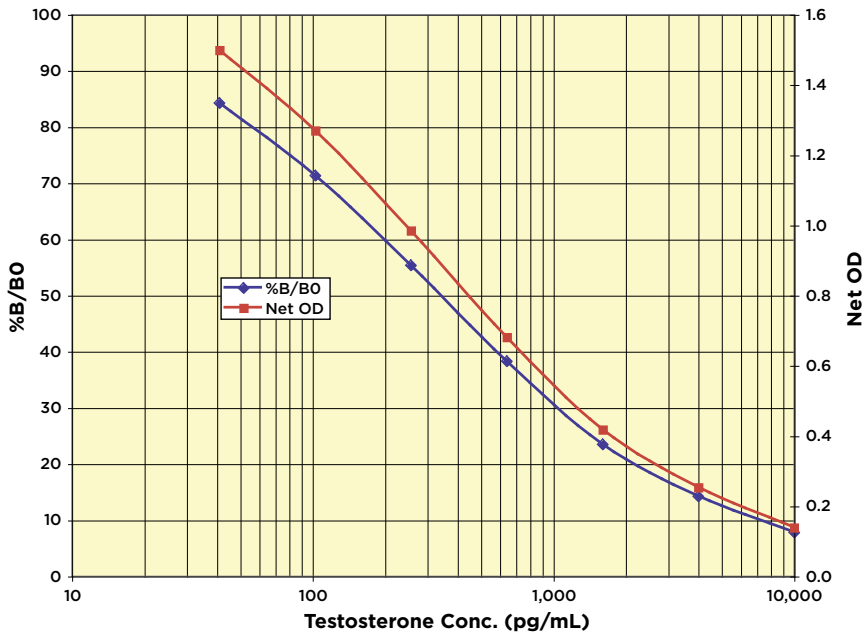
The testosterone standard stock is provided in a solution that contains an organic solvent. Prerinse the pipet tip several times to ensure accurate delivery.



## TYPICAL DATA USING ARBOR ASSAYS COMPONENTS

Sample	Mean OD	Net OD	% B/B0	Testosterone Conc. (pg/mL)
NSB	0.060	0.000	---	-
Standard 1	0.200	0.140	7.84	10,000
Standard 2	0.315	0.255	14.33	4,000
Standard 3	0.479	0.419	23.51	1,600
Standard 4	0.743	0.683	38.34	640
Standard 5	1.046	0.986	55.39	256
Standard 6	1.331	1.271	71.40	102.4
Standard 7	1.560	1.500	84.24	40.96
B0	1.840	1.780	100.00	0
Sample 1	0.654	0.594	33.37	845.0
Sample 2	1.176	1.116	62.70	170.8

**Always run your own standard curve for calculation of results. Do not use this data.**



## CROSS REACTIVITY

The following cross reactants were tested in the assay and calculated at the 50% binding point.

Steroid	Cross Reactivity (%)
Testosterone	100%
Dihydrotestosterone	35.4%
Aldosterone	< .04%
Progesterone	0.024%
Corticosterone	< 0.004
Cortisol	< 0.004
Cortisone	< 0.004
17 $\beta$ -Estradiol	< 0.004

## SAMPLES

The kit has been tested in a diverse range of species. These are:



Mountain Gorilla,  
Fecal



Takin, Fecal



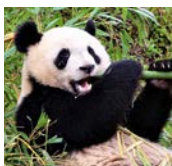
Black Rhino,  
Fecal



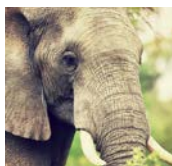
Nile Hippopotamus,  
Fecal



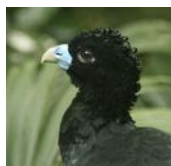
Lion, Fecal



Panda, Urine



African Elephant,  
Serum



Blue-billed  
Curassow, Fecal



Southern Stingray,  
Plasma

**NOTE:** Only preliminary testing has been carried out and the results are unpublished. The responsibility for validating the kit for various species, sample types and applications is the end user's. ISWE recommends that for every species and sample type, both laboratory (recovery and parallelism tests) and biological validations be conducted. References for validation methods can be obtained on the ISWE website, [www.iswe-endo.org/resources/](http://www.iswe-endo.org/resources/), or at [admin@iswe-endo.org](mailto:admin@iswe-endo.org). Contact Arbor Assays at [technical@arborassays.com](mailto:technical@arborassays.com) with your results using this kit so that we may pass on information about the use of the kit. Reported use of this kit can also be found on WEIN, [www.iswe-endo.org/wein/](http://www.iswe-endo.org/wein/).



ARBOR  
ASSAYS

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EXPECT ASSAY ARTISTRY™

## LIMITED WARRANTY

Arbor Assays warrants that at the time of shipment this product is free from defects in materials and workmanship. This warranty is in lieu of any other warranty expressed or implied, including but not limited to, any implied warranty of merchantability or fitness for a particular purpose.

We must be notified of any breach of this warranty within 48 hours of receipt of the product. No claim shall be honored if we are not notified within this time period, or if the product has been stored in any way other than outlined in this publication. The sole and exclusive remedy of the customer for any liability based upon this warranty is limited to the replacement of the product, or refund of the invoice price of the goods.

## CONTACT INFORMATION

For details concerning this kit or to order any of our products please contact us:

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## OFFICIAL SUPPLIER TO ISWE

Arbor Assays and the International Society of Wildlife Endocrinology (ISWE) signed an exclusive agreement for Arbor Assays to supply ISWE members with EIA kits for wildlife conservation research.

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