

# ISWE

## 11-Oxoetiocholanolone (72T) Mini-Kit

Catalog Number ISWE010

**Species Independent** 



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

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#### WEB ISWE010 231009

### MINI-KIT PRINCIPLE

The ISWE 11-Oxoetiocholanolone (72T) Mini-Kit is specifically designed to measure a group of glucocorticoid metabolites with a  $5\beta$ - $3\alpha$ -01-11-one configuration 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 Mini-Kit:

1. The ISWE 11-Oxoetiocholanolone rabbit antibody was raised from the respective 17-CMO:BSA derivative of 72T. 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 72T cannot be directly coated onto plates for EIA use. It is unpurified rabbit 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.

- The ISWE 11-Oxoetiocholanolone Peroxidase conjugate was synthesized from the respective 17-CMO derivative of 72T and has been diluted in a stabilizing solution (see below) to ensure long term stability. It is at a nominal "50X" concentration\*.
- 3. The 11-Oxoetiocholanolone Standard is synthetic steroid in a stabilizing solution containing buffer and organic solvent. It is supplied at 4,000 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 EIA reagents. The ISWE Antibody was diluted in 1X Assay Buffer, from X065, at 1:50 and the ISWE Conjugate diluted in Conjugate Diluent, X076, at 1:50. The assay utilized 100 uL sample, 50 uL antibody and 50 uL conjugate added to goat anti-rabbit IgG coated plate, 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 72T Antibody 50x Concentrate

A 50X Concentrate rabbit polyclonal antibody specific for 11-oxoetiocholanolone diluted in a buffer with proteins, detergents and preservatives.

6 mL Catalog Number C327-6ML

#### ISWE 72T-HRP Conjugate 50x Concentrate

A 50X Concentrate 11-oxoetiocholanolone-peroxidase conjugate in a special stabilizing solution. 6 mL Catalog Number C328-6ML

#### 72T Standard

11-Oxoetiocholanolone at 4,000 ng/mL in a special stabilizing solution. 1 mL Catalog Number C312-1ML

### STORAGE INSTRUCTIONS

All components of this kit must be aliquoted into single use volumes 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 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 (1N HCI)	X020-25ML	
Kathon Preservative	X129-25ML	
Plate Coating Buffer 20x Concentrate	X108-100ML	
Blocking Buffer 10x Concentrate	X109-250ML	
Goat anti-Rabbit IgG, Affnity Purified	A009-10MG/-23MG/-50MG/-100MG	
Arbor Assays ISWE Plate Coating Course	Contact us for details	
Assay Development ISWE Accessory Kit	ISWE006	
Goat anti-Rabbit IgG ISWE Plate Coating Accessory Kit (10 Plate)	ISWE005	



### PRECAUTIONS

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

The rabbit anti-72T 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 at least 1 week at 4°C. Please see Related Materials on page 3 for a suitable Assay Buffer.

The 72T-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 at least 1 week 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 72T standard stock is provided in a solution that contains an organic solvent. Pre-rinse the pipet tip several times to ensure accurate delivery.

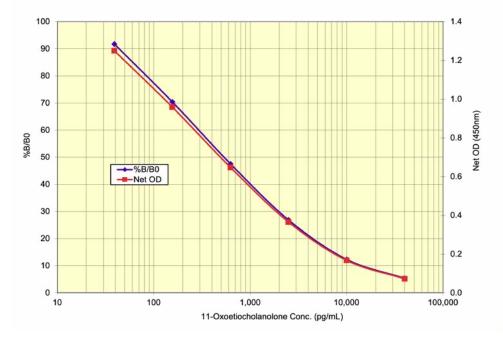
Incubate 100µL of sample or standards. 50µL of diluted conjugate, and 50µL of diluted antibody for two hours at room temperature with shaking (recommend 700-900 rpm). Wash the plate. Add TMB as substrate and quench with Stop Solution. The 50-fold diluted ISWE Mini-kit antibody and conjugate with an Arbor Assays antibody coated plate will generate above 1.0 OD at 450 nm. YOUR RESULTS MAY VARY DEPENDING ON A NUMBER OF VARIABLES.



#### **TYPICAL DATA USING ARBOR ASSAYS COMPONENTS**

Sample	Mean OD	Net OD	% B/B0	72T Conc. (pg/mL)
NSB	0.081	0.000	-	-
Standard 1	0.153	0.073	5.3	40,000
Standard 2	0.248	0.168	12.3	10,000
Standard 3	0.446	0.366	26.8	2,500
Standard 4	0.728	0.648	47.6	625.00
Standard 5	1.039	0.959	70.4	156.25
Standard 6	1.330	1.250	91.8	39.06
В0	1.442	1.362	100.00	0

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



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#### CROSS REACTIVITY (%)

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

Molecule	Cross Reactivity (%)
$5\beta$ - $3\alpha$ -hydroxyandrostan-11,17-dione (11-Oxoetiocholanolone)	100.00%
5 $\beta$ -Pregnan-3 $\alpha$ -ol-11,20-dione (Alloalfaxolone)	9.62%
5β-Androstan-3,1,17-trione	4.75%
5 $\beta$ -Androstan-3 $\alpha$ ,11B-diol-17-one (11B-Hydroxyeticholanolone)	0.99%
5 $\beta$ -Pregnan-3 $\alpha$ ,11B,21-triol-20-one (Tetrahydrocorticosterone)	0.20%
5β-Pregnan-3α,11β-diol-20-one	0.09%
Cortisone	0.06%
Corticosterone	<0.04%
Cortisol	<0.04%
17β-Estradiol	<0.04%
Progesterone	<0.04%
Testosterone	<0.04%

#### SAMPLES

The kit has been tested in feces from a diverse range of species. Including:

African elephant, Cape Buffalo,		Mandrill,	Ghost Bat,		
Loxodonta africana Syncerus Caffer		Mandrillus Sphinx	Macroderma Gigas		
Asian elephant,	Giraffe,	Golden Langur,	Brushtail Possum,		
Elephas maximus	Giraffa Camelopardalis	Trachypithecus Geei	Trichosurus Vulpecula		
Okapi, Okapia johnstoni			Echidna, Tachyglossus Aculeatus		
Florida manatee,	Chamois, Rupicapra Rupicapra	Fat-Tailed Dunnart,	Blue-And-Yellow Macaw, Ara		
Trichechus manatus latirostri		Sminthopsis Crassicaudata	Ararauna		
Hippopotomus, Hippopotamus amphibius	Tiger, Panthera Tigris	Gould's Wattled Bat, Chalinolobus Gouldii			
Blue wildebeest,	Gorilla,	Leadbeater's Possum,			
Connochaetes taurinus	Gorilla Gorilla Gorilla	Gymnobelideus Leadbeateri			

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, <u>www.iswe-endo.org/resources/</u>, or at <u>admin@iswe-endo.org</u>. Contact Arbor Assays at <u>technical@arborassays.com</u> 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, <u>www.iswe-endo.org/wein/</u>.

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### 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:

#### Arbor Assays

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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.



The Arbor Assays logo is a registered trademark.





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