



Product Specification Sheet

Tricyclic Antidepressant (TCA) antibody

□ Cat# TCA11-S

Rabbit anti-TCA antibody

SIZE: 100 µl

Tricyclic Antidepressants or TCA is used for the treatment of depressive disorders. TCA overdose is one of the most common causes of death from prescription drugs. TCAs are primarily taken orally or by injection. TCA is metabolized in the liver and excreted in urine. The FDA cutoff recommended for TCA is 1,000 ng/ml.

Source of Antigen and Antibodies

Uniprot: P0DTC9

Host: Rabbit

Clonality: Polyclonal

Immunogen: TCA conjugated to BSA

Purification: N/A

Recommended Secondary Antibody: Goat anti-Rabbit IgG-HRP (ADI cat#20320)

Negative Control: Non-immune Rabbit IgG (ADI cat# 20009-1).

Form & Storage of Antibodies

□ **Neat sera**

Concentration: N/A

Volume: 100 µl

Supplied as whole sera

□ **Lyophilized powder**

Lyophilized from neat sera. Reconstitute in 100 µl distilled water

Storage:

Short-term: 4°C for 3 months

Long-term: at -20°C or below in suitable aliquots after reconstitution for 1 year. Do not expose to multiple freeze/thaw cycles or store working, diluted solutions. Glycerol may be added to a final concentration of 50% and antibodies can be stored un-aliquoted at -20°C.

Recommended Usage

ELISA: Assay dependent concentration. 1:20,000 to 1:40,000 using a rabbit antibody capture format. 1:250,000 to 1:1,000,000 using an indirect competitive test. (See next page for results)

Lateral Flow: Assay dependent. Minimum recommended concentration of 5 µg/ml when conjugated to colloidal gold in a salt free buffer at pH 7-9.*Purified IgG fraction can be produced for rapid test conjugation.

IHC/ICC: Assay dependent concentration

The above concentrations are a *suggestion*, user's must optimize the concentrations based on their own use.

**This product is for In vitro research use only.*

Related materials available from ADI

Catalog#	Description
TCA11-M	Monoclonal Anti-Tricyclic Antidepressant (TCA), clone 1
TCA12-M	Monoclonal Anti-Tricyclic Antidepressant (TCA), clone 2
TCA13-A	Tricyclic Antidepressant (TCA) BSA
TCA11-S	050820IA



Direct ELISA validation of TCA antibody

A450	0.007	2.321	2.053	1.958	1.807	1.161	0.886	0.388	0.199
Nortriptyline (ng/ml)	NSB	0	0.064	0.32	1.6	8	40	200	1,000

Direct ELISA: Goat anti-Rabbit IgG Fc was coated to an ELISA microplate. 50 µl of a 1:15,000 dilution of TCA11-S was added to each well along with 40 µl of Nortriptyline-HRP and 10 µl of Nortriptyline standards and incubated for 1 hour at room temperature. After 1 hour, the plates were washed and TMB was added and incubated for 15 minutes. The reaction was stopped with Sulfuric Acid and the plate was read at A450 nm.

LOD: The antibody exhibits a sensitivity <64 pg/ml.

Indirect competitive ELISA validation of TCA antibody

A450	0.014	1.92	1.682	1.59	1.347	1.036	0.571	0.204	0.077
Nortriptyline (ng/ml)	NSB	0	0.064	0.32	1.6	8	40	200	1,000

Indirect competitive ELISA: TCA was coated to ELISA microplate at a concentration of 2 µg/ml. 10 µl of Nortriptyline standards and 90 µl of TCA11-S was added to each well at a 1:250,000 dilution and incubated for 1 hour. After 1 hour, the plate was washed and incubated with Goat anti-Rabbit IgG Fc HRP for 30 minutes. The plate was then washed and TMB was added for 15 minutes. The reaction was stopped with Sulfuric Acid and was read at A450 nm.