Datasheet for ABIN400591

Diazepam ELISA Kit

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Overview

Quantity:	96 tests
Target:	Diazepam
Reactivity:	Chemical
Method Type:	Competition ELISA
Application:	ELISA

Product Details

Purpose:	This test kit is based on the competitive enzyme immunoassay for the detection of Diazepam in the feed, urine, liver and meat. The coupling antigen is pre-coated on the micro-well stripes. The Diazepam in the sample and the coupling antigen pre-coated on the micro-well stripes compete for the anti-Diazepam antibodies. After the addition of the enzyme conjugate, the TMB substrate is added for coloration. The optical density (OD) value of the sample has a negative correlation with the Diazepam in it. This value is compared to the standard curve and the Diazepam concentration is subsequently obtained.
Analytical Method:	Qualitative and Quantitative
Detection Method:	Colorimetric
Components:	Micro-well strips: 12 strips with 8 removable wells each 6 standard solution (1 mL each): 0 ppb, 0.1 ppb, 0.3 ppb, 0.9 ppb, 2.7 ppb, 8.1 ppb, Enzyme conjugate (12 mL) red cap, Antibody working solution (7 mL) blue cap, Substrate A solution (7 mL) white cap, Substrate B solution (7 mL) black cap, Stop solution (7 mL) yellow cap, 20 concentrated washing buffer (40 mL) white cap, 2 concentrated redissolving solution (50 mL) transparent cap
Material not included:	Equipments: microplate reader, printer, homogenizer, nitrogen-drying device, votex, centrifuge,

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	measuring pipets, balance (a sensibility reciprocal of 0.01 g). Micropipettors: single-channel 20 to 100 L and 200 to 1000 L, and multi-channel 250 L. Reagents: N-hexane, NaOH,Dichloromethane(CH2Cl2), CH3CN.

Target Details

Target:	Diazepam
Target Type:	Chemical

Application Details

Plate:	Pre-coated
Protocol:	**Sample pre-treatment:** Instructions (The following points must be dealt with before the pre-treatment) Only the disposable tips can be used for the experiments and the tips must be changed when used for absorbing different reagents, Before the experiment, each experimental utensil must be clean and should be re-cleaned if necessary, in order to avoid the contamination that interferes with the experimental results. Solution preparation before sample pre-treatment: 1 M NaOH: dissolve 4 g NaOH in 100 mL deionized water. The concentrated redissolving solution is mixed with deionized water at 1:1 (1 mL concentrated redissolving solution + 1 mL deionized water), used for the treated sample redissolving. 3) N-hexane-CH2Cl2 solution: ?N-hexane:?CH2Cl2 = 5:3. 5.1 Animal tissues (meat ,liver) Take the sample, homogenize at 10000 r/min for 1 min, Weigh 2 0.05 g of the homogenized sample, put into 50 mL centrifugal tube, add 5 mL CH3CN,1 mL 2 M NaOH, shake properly for 10 min, centrifuge at above 4000 r/min at 10oC for 10 min, Take 3 mL supernatant(upper layer) into a new centrifugal tube, add 200 L 2 M NaOH, 6 mL N-hexane-CH2Cl2 solution, shake for 10 min, and centrifuge at above 4000 r/min at 20-25oC for 5 min, Static for 5-10 min, transfer all supernatant into a new centrifugal tube, blow to dry with nitrogen, Dilute residues in 1 mL of the diluted redissolving solution, Take sample solution, dilute at 1:9 (50 L sample solution + 450 L diluted redissolving solution), Take 50 L for further analysis. Fold of dilution of the sample: 10 Detection limit: 1 ppb 5.2 Urine Put 1 mL clear sample into 50 mL centrifuge tube, add 4 mL 0.1 M NaOH, shake properly for 2-5 min, Transfer 1 mL liquid into another centerifugal tube, add 10 mL N-hexane, shake for 5 min, and centrifuge at above 4000 r/min at 20-25oC for 5 min, Transfer 5 mL supernatant into a new centrifugal tube, blow to dry with nitrogen, Dilute with 1 mL of the diluted redissolving solution, Take 50 L for further analysis. Fold of dilution of the sample: 10 Detection limit: 1ppb 5.3 Feed Put 1.0 0.05 g feed into 50 mL centrifugal tube, add 6 mL deionized water and 1 mL 1 M NaOH, vortex for 1 min, add 6 mL N-hexane-CH2Cl2

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	solution(5:3), shake properly for 10 min, centrifuge at above 4000 r/min at room temperature for 5 min, Take 3 mL supernatant(upper layer), blow to dry with nitrogen at 50oC, Dilute with 1 mL of the diluted redissolving solution . Dilution: at 1:49(10 L sample + 490 L the diluted redissolving solution). Take 50 L for further analysis Fold of dilution of the sample: 100
Restrictions:	For Research Use only

Handling

Storage:	4 °C