Anti-UR144/XLR11 (K2/Spice), synthetic cannabinoids, IgG

Sheep Polyclonal Antibody
Cat. #1083 Lot P0712

LIMITATIONS: THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT APPROVED FOR THERAPEUTIC OR DIAGNOSTIC USE.

Background:
The Tulip Biolabs, Inc. Anti-UR144/XLR11 (K2/Spice), synthetic cannabinoids, Cat. #1083, is a sheep polyclonal IgG antibody. It has been used in a competitive ELISA format to test the presence of UR144 and XLR11 and their metabolites in samples such as human urine. Cross-reactivity of various tested compounds are listed in Table 1.

Note: If this antibody is used in an immunoassay to detect synthetic cannabinoids, suspect test samples must be confirmed using an alternative analytical method, for example LC-MS-MS.

Immunogen:
UR-144 conjugated to a carrier protein.

Supplied As:
2 mg/ml of protein G purified sheep IgG in phosphate buffered saline with 0.05% sodium azide preservative.

Storage and Stability:
Stable for 1 year from date of shipment when stored at -20 or -70˚C. Stable for at least 1 month at 4˚C. Avoid freeze/thaw cycles.

Specificity and Comments:
Recognizes the synthetic cannabinoids UR-144 and XLR-11 and several of their metabolites (see Table 1).

Applications and Suggested Dilutions:
ELISA (for 96-well plate coating use 1-3µg/mL)
Note: This antibody is used in the Cat. #4500 UR-144/XLR-11 (K2/Spice) ELISA kit.
Other methods not tested.

Please note: This information is intended as a guide. The optimal concentrations must be determined by the user.

Tulip BioLabs Other Related Products:
Cat. #4500
UR-144/XLR-11 (K2/Spice) Synth Cannabinoids ELISA Kit
Cat. #8502
UR-144 x HRP Conjugate
Cat. #1066
Anti-K2/Spice, synthetic cannabinoids, IgG
Cat. #1072
Anti-JWH-250 (K2/Spice), IgG
Cat. #1086
Anti-PB-22, synthetic cannabinoid, IgG
Cat. #1087
Anti-AKB48 synthetic cannabinoid, IgG

Original Reference:
A. Arntson *et al,* (2014) *Am Assoc Forensic Sci Meeting Abstract* **K27**

Useful References:
J.W. Huffman and D. Dai (1994) *Bioorg Med Chemistry* **4** 563
S. Dresen *et al.* (2010) *J Mass Spectrometry* **45** 760
M. Hutter *et al.* (2012) *J Mass Spectrometry* **47** 54
A. Wohlfarth *et al.* (2013) *Anal Chem* **85** 3730

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Table 1: Drug and Metabolite Cross-Reactivity Relative to UR-144-5-OH

COMPOUND	Cross-reactivity, %
UR-144-5-OH (calibrator)	*100*
UR-144 N-pentanoic acid	100
UR-144-4-OH	50
XLR-11 4-OH	50
XLR-11	8
UR-144	6
JWH-018 5-OH	neg
JWH-250 4-OH	neg
JWH-250 5-OH	neg
JWH-018	neg
AM2201	neg
Win 55-212-3	neg
RCS-4 Desmethyl-4-OH	neg
JWH-081 Desmethyl-4-OH	neg
JWH-081 Desmethyl-5-OH	neg
JWH-250 4-OH	neg
JWH-018 5-OH	neg
JWH-210 4-OH	neg
JWH-022 3-OH	neg
JWH-022 5-OH	neg
JWH-210 5-OH	neg
JWH-019 6-OH Hexyl	neg
JWH-073 3-OH Hexyl	neg
JWH-122 4-OH	neg
JWH-019 5-OH	neg
AM2201 4-OH	neg
JWH-073 4-OH	neg
JWH-018 4-OH	neg
JWH-122 5-OH	neg
JWH-018 Adamantyl	neg
JWH-018 5-Chloropentyl	neg
JWH-018 5-OH Glucuronide	neg
EDDP	neg
Methadone	neg
Methamphetamine	neg
Codeine	neg
Morphine	neg
PCP	neg
Cocaine	neg
Benzoylecgonine	neg
THC	neg
THC 11-OH	neg
THC Carboxy	neg
Cannabadiol	neg
MDMA	neg

Note: Cross-reactivity was determined using Cat. #4500 UR-144/XLR-11 (K2/Spice) Synth Cannabinoids ELISA Kit.

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