
**Anti-JWH-250 (K2/Spice)
synthetic cannabinoid, IgG**

**Rabbit Polyclonal Antibody
Cat. #1072 Lot P0710**

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

Background:

The Tulip Biolabs, Inc. Anti-JWH-250 (K2/Spice) synthetic cannabinoid, Cat. #1072, is a rabbit polyclonal IgG antibody. It has been used in a competitive ELISA format to test the presence of JWH-250 and its metabolites in samples such as human urine (see Arntson *et al.*, 2013). 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:

JWH-250 conjugated to a carrier protein.

Supplied As:

2 mg/ml of protein A purified rabbit 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 cannabinoid JWH-250, and several of its metabolites (see Table 1 and A. Arntson *et al.* (2013) *J. Analyt. Toxicol.* **37** 284).

Applications and Suggested Dilutions:

ELISA (for 96-well plate coating use 1-3µg/mL)
Note: This antibody is used in the Cat. #4400 JWH-250 (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. #4400

**JWH-250 (K2/Spice) Synth Cannabinoid
ELISA Kit.**

Cat. #8402

JWH-250 x HRP Conjugate

Cat. #1066

Anti-JWH-018 (Spice/K2), IgG

Cat. #1083

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

Cat. #1086

Anti-PB-22, synthetic cannabinoid, IgG

Cat. #1087

Anti-AKB48, synthetic cannabinoid, IgG

Original Reference:

A. Arntson *et al.* (2013) *J. Analyt. Toxicol.* **37** 284

Note: This antibody was developed at Tulip Biolabs, Inc.

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

Table 1. Drug and Metabolite Cross-Reactivity Relative to JWH-250-4-OH

COMPOUND	Crossreactivity, %
JWH-250-4-OH (calibrator)	100
JWH-250-5-OH	50
JWH-250-N-pentanoic acid metab	50
JWH-250	12
AKB 48	<1
AM-1220	<1
JWH-018-N-5-OH-pentyl metab	<1
JWH-018-5-OH glucuronide	<1
JWH-018-6-OH-indole metab	<1
JWH-018-7-OH-indole metab	<1
JWH-022 C4 keto	<1
JWH-201	<1
JWH-203	<1
JWH-302	<1
RCS-8	<1
RCS-8 4-methoxy isomer	<1

Note: Cross-reactivity was determined using Cat. #4400 JWH-250 (K2/Spice) Synth Cannabinoid ELISA Kit. For additional cross-reactivity data see A. Arntson *et al.* (2013) *J. Analyt. Toxicol.* **37** 284.