

Datasheet: 9260-2505

Description:	SHEEP ANTI RABBIT TRYPTOPHAN HYDROXYLASE
Specificity:	TRYPTOPHAN HYDROXYLASE
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	25 μΙ

## **Product Details**

# **Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.biorad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry				
Immunohistology - Frozen	•			
Immunohistology - Paraffin				
ELISA				
Western Blotting	•			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using the appropriate negative/positive controls.

Target Species	Rabbit
Species Cross	Reacts with: Rat, Human
Reactivity	Based on sequence similarity is expected to rea

Based on sequence similarity, is expected to react with: Mammals

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form	Purified Ig - liquid
Preparation	Purified Ig prepared by affinity chromatography
Buffer Solution	HEPES buffered saline
Preservative	<0.1% Sodium Azide (NaN₃)

Stabilisers	50% Glycerol 0.01% Bovine Serum Albumin
Immunogen	Recombinant rabbit tryptophan hydroxylase, isolated as inclusion bodies from <i>E. coli</i> and purified by preparative SDS-PAGE.
External Database Links	UniProt: P17290 Related reagents
Synonyms	TPH
RRID	AB_620477
Specificity	Sheep anti Rabbit tryptophan hydroxylase antibody recognizes tryptophan hydroxylase, also known as Tryptophan 5-hydroxylase 1 or Tryptophan 5-monooxygenase 1. Tryptophan hydroxylase is a 444 amino acid ~55 kDa enzyme involved in the synthesis of the neurotransmitter serotonin.
Immunohistology	9260-2505 has been used for immunohistochemistry on formaldehyde fixed tissue, it is useful for cell body but not fiber staining
References	<ol> <li>Lowry, C.A. <i>et al.</i> (2000) Corticotropin-releasing factor increases <i>in vitro</i> firing rates of serotonergic neurons in the rat dorsal raphe nucleus: evidence for activation of a topographically organized mesolimbocortical serotonergic system. J Neurosci. 20 (20): 7728-36.</li> <li>Federici, L.M. <i>et al.</i> (2016) Hypothalamic orexin's role in exacerbated cutaneous vasodilation responses to an anxiogenic stimulus in a surgical menopause model. Psychoneuroendocrinology. 65: 127-37.</li> <li>Johnson, P.L. <i>et al.</i> (2005) Acute hypercarbic gas exposure reveals functionally distinct subpopulations of serotonergic neurons in rats. J Psychopharmacol. 19 (4): 327-41.</li> <li>Sajdyk, T.J. <i>et al.</i> (2008) Neuropeptide Y in the amygdala induces long-term resilience to stress-induced reductions in social responses but not hypothalamic-adrenal-pituitary axis activity or hyperthermia. J Neurosci. 28 (4): 893-903.</li> <li>Johnson, P. <i>et al.</i> (2008) Disruption of GABAergic tone in the dorsomedial hypothalamus attenuates responses in a subset of serotonergic neurons in the dorsal raphe nucleus following lactate-induced panic. J Psychopharmacol. 22 (6): 642-52.</li> <li>Yu, B. <i>et al.</i> (2016) Mechanisms Underlying Footshock and Psychological Stress-Induced Abrupt Awakening From Posttraumatic "Nightmares". Int J Neuropsychopharmacol. 19 (4): pyv113.</li> <li>Abrams, J.K. <i>et al.</i> (2005) Serotonergic systems associated with arousal and vigilance behaviors following administration of anxiogenic drugs. Neuroscience. 133 (4): 983-97.</li> <li>Staub, D.R. <i>et al.</i> (2005) Urocortin 2 increases c-Fos expression in topographically organized subpopulations of serotonergic neurons in the rat dorsal raphe nucleus. Brain</li> </ol>

9. Cui, S.Y. *et al.* (2011) Diltiazem potentiates pentobarbital-induced hypnosis via 5-HT1A and 5-HT2A/2C receptors: role for dorsal raphe nucleus. <u>Pharmacol Biochem Behav. 99</u> (4): 566-72.

Res. 1044 (2): 176-89.

- 10. Bouwknecht, J.A. et al. (2007) Differential effects of exposure to low-light or high-light open-field on anxiety-related behaviors: relationship to c-Fos expression in serotonergic and non-serotonergic neurons in the dorsal raphe nucleus. Brain Res Bull. 72 (1): 32-43.
- 11. Gardner, K.L. et al. (2005) Early life experience alters behavior during social defeat: focus on serotonergic systems. Neuroscience. 136 (1): 181-91.
- 12. Hale, M.W. et al. (2008) Exposure to an open-field arena increases c-Fos expression in a subpopulation of neurons in the dorsal raphe nucleus, including neurons projecting to the basolateral amygdaloid complex. Neuroscience. 157 (4): 733-48.
- 13. Spiga, F. et al. (2006) Injections of urocortin 1 into the basolateral amygdala induce anxiety-like behavior and c-Fos expression in brainstem serotonergic neurons. Neuroscience. 138 (4): 1265-76.
- 14. Staub, D.R. et al. (2006) Evidence supporting a role for corticotropin-releasing factor type 2 (CRF2) receptors in the regulation of subpopulations of serotonergic neurons. Brain Res. 1070 (1): 77-89.
- 15. Lowry, C.A. et al. (2007) Identification of an immune-responsive mesolimbocortical serotonergic system: potential role in regulation of emotional behavior. Neuroscience. 146 (2): 756-72.

#### Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10088 available at: <a href="https://www.bio-rad-antibodies.com/SDS/9260-2505">https://www.bio-rad-antibodies.com/SDS/9260-2505</a> 10088
Regulatory	For research purposes only

# Related Products

### **Recommended Secondary Antibodies**

Rabbit Anti Sheep IgG (H/L) (5184-2304...) Biotin

North & South Tel: +1 800 265 7376 America

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M420470:230706'

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