

Resource Summary Report

Generated by [FDI Lab - SciCrunch.org](#) on May 11, 2024

Glutamate Antibody

RRID:AB_572244

Type: Antibody

Proper Citation

(ImmunoStar Cat# 22523, RRID:AB_572244)

Antibody Information

URL: http://antibodyregistry.org/AB_572244

Proper Citation: (ImmunoStar Cat# 22523, RRID:AB_572244)

Target Antigen: Glutamate

Host Organism: mouse

Clonality: monoclonal

Comments: Manufacturer Applications: Immunohistochemistry, Immunocytochemistry, Immunofluorescence; Note, The Glutamate Antibody was raised to glutamate coupled to KLH with glutaraldehyde. The antibody produces strong labeling of glutamate at dilutions of 1/2,000 - 1/4,000 using biotin-streptavidin/HRP technique. Glutamate tissue staining is completely eliminated by preincubation with glutamate conjugate at concentrations of 100 µg conjugate per mL of diluted antiserum. Aspartate and glutamine conjugates could not significantly inhibit tissue staining. The following amino acids were tested for cross reactivity using an enzyme-linked immunoassay method. Wells were coated with Glu-Glut-Btg at 1 µg per mL. Amino acids and conjugate were added at concentrations from 10 µg to 1 ng per mL. The Glutamate antibody was added to wells at 1 µg per mL. These amino acids were found to have cross reactivity at less than 1%: Beta-alanine, L-alanine, L-aspartic acid, L-glutamic acid, Glycine, Taurine and L-tyrosine.; Gene Symbol: GRIK3

Antibody Name: Glutamate Antibody

Description: This monoclonal targets Glutamate

Target Organism: cat, cockroach, crayfish, fish, hamster, human, leech, monkey, mouse, rabbit, rat

Defining Citation: [PMID:9614234](#), [PMID:16108008](#), [PMID:8809793](#), [PMID:8558257](#), [PMID:1347162](#), [PMID:7901805](#), [PMID:2133358](#), [PMID:1358864](#), [PMID:1672808](#), [PMID:2569540](#), [PMID:2283309](#)

Antibody ID: AB_572244

Vendor: ImmunoStar

Catalog Number: 22523

Ratings and Alerts

No rating or validation information has been found for Glutamate Antibody.

No alerts have been found for Glutamate Antibody.

Data and Source Information

Source: [Antibody Registry](#)

Usage and Citation Metrics

We found 30 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Takeuchi Y, et al. (2021) Closed-loop stimulation of the medial septum terminates epileptic seizures. *Brain : a journal of neurology*, 144(3), 885.

Ackermann M, et al. (2011) The vertebrate homolog of sulfide-quinone reductase is expressed in mitochondria of neuronal tissues. *Neuroscience*, 199, 1.

Uematsu K, et al. (2007) Central mechanisms underlying fish swimming. *Brain, behavior and evolution*, 69(2), 142.

Garrido Sanabria ER, et al. (2006) Septal GABAergic neurons are selectively vulnerable to pilocarpine-induced status epilepticus and chronic spontaneous seizures. *Neuroscience*, 142(3), 871.

Park KI, et al. (2006) Neural stem cells may be uniquely suited for combined gene therapy and cell replacement: Evidence from engraftment of Neurotrophin-3-expressing stem cells in hypoxic-ischemic brain injury. *Experimental neurology*, 199(1), 179.

Morales FR, et al. (2006) Brainstem glycinergic neurons and their activation during active (rapid eye movement) sleep in the cat. *Neuroscience*, 142(1), 37.

Colom LV, et al. (2005) Characterization of medial septal glutamatergic neurons and their projection to the hippocampus. *Synapse (New York, N.Y.)*, 58(3), 151.

Vadivelu S, et al. (2005) Multi-germ layer lineage central nervous system repair: nerve and vascular cell generation by embryonic stem cells transplanted in the injured brain. *Journal of neurosurgery*, 103(1), 124.

Tong Q, et al. (2003) Localization and function of metabotropic glutamate receptor 8 in the enteric nervous system. *American journal of physiology. Gastrointestinal and liver physiology*, 285(5), G992.

Lee HS, et al. (2003) Glutamatergic afferent projections to the dorsal raphe nucleus of the rat. *Brain research*, 963(1-2), 57.

F -Tsukamoto Y, et al. (2003) Neurohormonal and glutamatergic neuronal control of the cardioarterial valves in the isopod crustacean *Bathynomus doederleini*. *The Journal of experimental biology*, 206(Pt 3), 431.

Korada S, et al. (2002) Fibroblast growth factor 2 is necessary for the growth of glutamate projection neurons in the anterior neocortex. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 22(3), 863.

Catapano LA, et al. (2001) Specific neurotrophic factors support the survival of cortical projection neurons at distinct stages of development. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 21(22), 8863.

Goldsmith PC, et al. (2000) Neuroglial responses to elevated glutamate in the medial basal hypothalamus of the infant mouse. *The Journal of nutrition*, 130(4S Suppl), 1032S.

Delgado JY, et al. (2000) Localization of GABA- and glutamate-like immunoreactivity in the cardiac ganglion of the lobster *Panulirus argus*. *Journal of neurocytology*, 29(8), 605.

Pose I, et al. (2000) Cuneiform neurons activated during cholinergically induced active sleep in the cat. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 20(9), 3319.

Shin JJ, et al. (2000) Transplanted neuroblasts differentiate appropriately into projection neurons with correct neurotransmitter and receptor phenotype in neocortex undergoing targeted projection neuron degeneration. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 20(19), 7404.

Jensen P, et al. (1999) Rescue of cerebellar granule cells from death in weaver NR1 double mutants. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 19(18), 7991.

Sulzer D, et al. (1998) Dopamine neurons make glutamatergic synapses in vitro. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 18(12), 4588.

McCasland JS, et al. (1997) GABAergic neurons in barrel cortex show strong, whisker-

dependent metabolic activation during normal behavior. The Journal of neuroscience : the official journal of the Society for Neuroscience, 17(14), 5509.