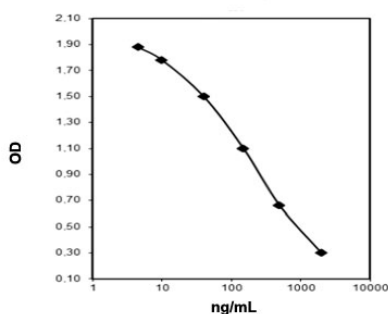


Dopamine ELISA Kit

Catalog # KA1887 Size 1 Kit

Applications



The standard curve is for the purpose of illustration only and should not be used to calculate unknowns. A standard curve should be generated each time the assay is performed.

Specification

Product Description	Dopamine ELISA Kit is an enzyme immunoassay for the quantitative determination of Dopamine in plasma and urine.
Suitable Sample	Plasma, Urine
Sample Volume	Extracted urine samples: 25 uL, Extracted plasma samples: 50 uL
Extraction Sample Volume	Urine: 10 uL, Plasma: 300 uL
Detection Method	Colorimetric
Assay Type	Quantitative
Calibration Range	Urine: 4.8 to 2000 ng/mL, Plasma: 75 to 33,333 pg/mL
Limit of Detection	Urine: 2.5 ng/mL, Plasma: 49 pg/mL
Regulation Status	For research use only (RUO)
Quality Control Testing	Standard Curve The standard curve is for the purpose of illustration only and should not be used to calculate unknowns. A standard curve should be generated each time the assay is performed.
Storage Instruction	Store the kit at 4°C.

Applications

- Quantification

Publication Reference

- [Zinc improves sexual performance and erectile function by preventing penile oxidative injury and upregulating circulating testosterone in lead-exposed rats.](#)

Elizabeth Enohnyket Besong, Tunmise Maryanne Akhigbe, Precious Jesutofunmi Ashonibare, Abimbola Ayoola Oladipo, Jacinta Nkechi Obimma, Moses Agbomhere Hamed, Damilare Hakeem Adeyemi, Roland Eghoghsoa Akhigbe.

Redox Report : Communications in Free Radical Research 2023 Dec; 28(1):2225675.

Application: Quant, Rat, Rat serum

- [Sodium acetate abates lead-induced sexual dysfunction by upregulating testosterone-dependent eNOS/NO/cGMP signaling and activating Nrf2/HO-1 in male Wistar rat.](#)

E E Besong, P J Ashonibare, T M Akhigbe, J N Obimma, R E Akhigbe.

Naunyn-Schmiedeberg's Archives of Pharmacology 2023 Sep; [Epub].

Application: ELISA, Rat, Rat plasma

- [Natural killer cells and innate lymphoid cells 1 tune anxiety-like behavior and memory in mice via interferon- \$\gamma\$ and acetylcholine.](#)

Stefano Garofalo, Germana Cocozza, Alessandro Mormino, Giovanni Bernardini, Eleonora Russo, Donald Ielpo, Diego Andolina, Rossella Ventura, Katiuscia Martinello, Massimiliano Renzi, Sergio Fucile, Mattia Laffranchi, Eva Piano Mortari, Rita Carsetti, Giuseppe Sciumè, Silvano Sozzani, Angela Santoni, Marie-Eve Tremblay, Richard M Ransohoff, Cristina Limatola.

Nature Communications 2023 May; 14(1):3103.

Application: ELISA, Mouse, Brain

- [Genetically engineered mesenchymal stem cells with dopamine synthesis for Parkinson's disease in animal models.](#)

Jun Li, Nan Li, Jingkuan Wei, Chun Feng, Yanying Chen, Tingwei Chen, Zongyong Ai, Xiaoqing Zhu, Weizhi Ji, Tianqing Li.

NPJ Parkinson's Disease 2022 Dec; 8(1):175.

Application: ELISA, Human, Mounkey, Rat, MSC cells, Cerebrospinal fluid

- [Challenge exposure to whole cigarette smoke condensate upregulates locomotor sensitization by stimulating \$\alpha 4 \beta 2\$ nicotinic acetylcholine receptors in the nucleus accumbens of rats.](#)

Ji Sun Kim, Oc-Hee Kim, In Soo Ryu, Yong-Hyun Kim, Kyung Oh Jeon, Li-Na Lim, Tae Wan Kim, Sumin Sohn, Sunghyun Kim, Jeong-Wook Seo, Eun Sang Choe, Eun Young Jang.

Pharmacology, Biochemistry, and Behavior 2022 Oct; 220:173469.

Application: Quant, Rat, Rat nucleus accumbens

- [L-Arginine reverses maternal and pre-pubertal codeine exposure-induced sexual dysfunction via upregulation of androgen receptor gene and NO/cGMP signaling.](#)

Roland Eghoghoso Akhigbe, Oladele A Afolabi, Ayodeji F Ajayi.

PLoS One 2022 Sep; 17(9):e0274411.

Application: Quant, Rat, Rat brain

- [Repeated social defeat stress exacerbates lipopolysaccharide-induced behavioural deficits in mice: ameliorative role of Chrysophyllum albidum fruit extract through anti-neuroinflammation, antioxidant and neurochemical balance.](#)

Abayomi M Ajayi, Benneth Ben-Azu, Gracious E Ogunkolade, John Melete, Ayomide T Oyedele, Solomon Umukoro.

Metabolic Brain Disease 2022 Jul; [Epub].

Application: Quant, Mouse, Brain tissue

- [Iron commensalism of mesenchymal glioblastoma promotes ferroptosis susceptibility upon dopamine treatment.](#)

Vu T A Vo, Sohyun Kim, Tuyen N M Hua, Jiwoong Oh, Yangsik Jeong.

Communications Biology 2022 Jun; 5(1):593.

Application: Quant, Human, proneural GBM stem cell conditioned medium

- [Prenatal Hypoxia Affects Nicotine Consumption and Withdrawal in Adult Rats via Impairment of the Glutamate System in the Brain.](#)

Viktor A Stratilov, Oleg V Vetrovoy, Ekaterina I Tyulkova.

Molecular Neurobiology 2022 Jul; 59(7):4550.

Application: Quant, Rat, Rat ventral striatum, ventral tegmental area (VTA)

- [Nicotine rather than non-nicotine substances in 3R4F WCSC increases behavioral sensitization and drug-taking behavior in rats.](#)

Sunghyun Kim, Sumin Sohn, In Soo Ryu, Ju Hwan Yang, Oc-Hee Kim, Ji Sun Kim, Yong-Hyun Kim, Eun Young Jang, Eun Sang Choe.

Nicotine & Tobacco Research 2022 Mar; ntac063.

Application: Quant, Rat, Brain

- [1-phenylcyclohexan-1-amine hydrochloride \(PCA HCl\) alters mesolimbic dopamine system accompanied by neuroplastic changes: A neuropsychopharmacological evaluation in rodents.](#)

Arvie Abiero, Raly James Perez Custodio, Chrislean Jun Botanas, Darlene Mae Ortiz, Leandro Val Sayson, Mikyung Kim, Hyun Jun Lee, Seolmin Yoon, Yong Sup Lee, Jae Hoon Cheong, Hee Jin Kim.

Neurochemistry International 2021 Jan; 144:104962.

Application: Quant, Mouse, Mouse brain

- [Influence of serum concentration in retinoic acid and phorbol ester induced differentiation of SH-SY5Y human neuroblastoma cell line.](#)

Kasthuri Bai Magalingam, Ammu Kutty Radhakrishnan, Sushela Devi Somanath, Shadab Md, Nagaraja Haleagrahara.

Molecular Biology Reports 2020 Nov; 47(11):8775.

Application: Quant, Human, SH-SY5Y cells

- [Developmental deficits and early signs of neurodegeneration revealed by PD patient derived dopamine neurons.](#)

Fang Luo, Sushan Luo, Wenjing Qian, Lin Zhang, Chen Chen, Meimei Xu, Guangling Wang, Zhongfeng Wang, Jian Wang, Wenyan Wang.

Stem Cell Research 2020 Dec; 49:102027.

Application: Quant, Human, Patient-derived dopamine neurons

- [Two newly-emerging substituted phenethylamines MAL and BOD induce differential psychopharmacological effects in rodents.](#)

Raly James Perez Custodio, Leandro Val Sayson, Chrislean Jun Botanas, Arvie Abiero, Mikyung Kim, Hyun Jun Lee, Hye Won Ryu, Yong Sup Lee, Hee Jin Kim, Jae Hoon Cheong.

Journal of Psychopharmacology 2020 Jul; 269881120936458.

Application: Quant, Mouse, Plasma

- [High-Performance Conducting Polymer Nanotube-based Liquid-Ion Gated Field-Effect Transistor Aptasensor for Dopamine Exocytosis.](#)

ark SJ, Lee J, Seo SE, Kim KH, Park CS, Lee SH, Ban HS, Lee BD, Song HS, Kim J, Lee CS, Bae J, Kwon OS.

Scientific Reports 2020 Feb; 10(1):3772.

Application: Quant, Rat, PC-12 cells

- [Curcumin attenuates copper-induced oxidative stress and neurotoxicity in Drosophila melanogaster.](#)

Amos O Abolaji, Kehinde D Fasae, Chizim E Iwezor, Michael Aschner, Ebenezer O Farombi.

Toxicology Reports 2020 Jan; 7:261.

Application: Quant, Fly, Fly head homogenized-supernatant

- [4-MeO-PCP and 3-MeO-PCMo, new dissociative drugs, produce rewarding and reinforcing effects through activation of mesolimbic dopamine pathway and alteration of accumbal CREB, deltaFosB, and BDNF levels.](#)

Abiero A, Botanas CJ, Custodio RJ, Sayson LV, Kim M, Lee HJ, Kim HJ, Lee KW, Jeong Y, Seo JW, Ryu IS, Lee YS, Cheong JH.

Psychopharmacology 2020 Mar; 237(3):757.

Application: Quant, Mouse, Mouse brains, Mouse nucleus accumbens

- [Age-Related Dopaminergic Innervation Augments T Helper 2-Type Allergic Inflammation in the Postnatal Lung.](#)

Wang W, Cohen JA, Wallrapp A, Trieu KG, Barrios J, Shao F, Krishnamoorthy N, Kuchroo VK, Jones MR, Fine A, Bai Y, Ai X.
Immunity 2019 Dec; 51(6):1102.

Application: Quant, Mouse, Mouse lungs

- [New insights into weight management by orlistat in comparison with cinnamon as a natural lipase inhibitor.](#)

Khedr NF, Ebeid AM, Khalil RM.
Endocrine 2020 Jan; 67(1):109.

Application: Quant, Human, Human serum

- [Rehmannioside A attenuates cognitive deficits in rats with vascular dementia \(VD\) through suppressing oxidative stress, inflammation and apoptosis.](#)

Sun M, Shen X, Ma Y.
Biomedicine & Pharmacotherapy 2019 Dec; 120:109492.

Application: Quant, Rat, Rat hippocampus

- [Methyl jasmonate ameliorates rotenone-induced motor deficits in rats through its neuroprotective activity and increased expression of tyrosine hydroxylase immunopositive cells.](#)

Alabi AO, Ajayi AM, Ben-Azu B, Omorobge O, Umukoro S.
Metabolic Brain Disease 2019 Dec; 34(6):1723.

Application: ELISA, Rat, Brain extracted

- [Genetic Deletion of Soluble Epoxide Hydroxylase Causes Anxiety-Like Behaviors in Mice.](#)

Lee HT, Lee KI, Lin HC, Lee TS.
Molecular Neurobiology 2018 Jul; [Epub].

Application: ELISA, Mouse, Brain lysates

- [Tau clearance improves astrocytic function and brain glutamate-glutamine cycle.](#)

Hebron ML, Javidnia M, Moussa CE.
Journal of the Neurological Sciences 2018 Aug; 391:90.

Application: Quant, Mouse, Mouse brains

- [D1 dopamine receptor is involved in shell formation in larvae of Pacific oyster Crassostrea gigas.](#)

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Developmental and Comparative Immunology 2018 Jul; 84:337.

Application: ELISA, Oyster, Larvae

- [Possible Signaling Pathways Mediating Neuronal Calcium Sensor-1-Dependent Spatial Learning and Memory in Mice.](#)

Nakamura TY, Nakao S, Nakajo Y, Takahashi JC, Wakabayashi S, Yanamoto H.

PLoS One 2017 Jan; 12(1):e0170829.

Application: Quant, Mouse, Mouse cerebral cortex

- [Effects of agmatine on secretion of interferon tau and catecholamines and expression of genes related to production of polyamines by ovine trophectoderm cells.](#)

Lenis YY, Wang X, Tang W, Wu G, Bazer FW.

Amino Acids 2016 Apr; 48(10):2389.

Application: Quan, Sheep, oTr1 cell

- [Paraquat Induces Cell Death Through Impairing Mitochondrial Membrane Permeability.](#)

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Molecular Neurobiology 2015 May; 53(4):2169.

Application: ELISA, Rat, Brain striatum extracted

- [Activated astrocytes enhance the dopaminergic differentiation of stem cells and promote brain repair through bFGF.](#)

Yang F, Liu Y, Tu J, Wan J, Zhang J, Wu B, Chen S, Zhou J, Mu Y, Wang L.

Nature Communications 2014 Dec; 5:5627.

Application: ELISA, Mouse, Dialysate extracted

- [Detection of Dopa-positive cells in mouse ovaries in response to ocular exposure to ultraviolet B rays.](#)

Hiramoto K, Yamate Y, Kawanishi S.

Photodermatology, Photoimmunology & Photomedicine 2015 May; 31(3):124.

Application: ELISA, Mouse, Plasma

- [Ubiquitination Increases Parkin Activity to Promote Autophagic \$\alpha\$ -Synuclein Clearance.](#)

Lonskaya I, Desforges NM, Hebron ML, Moussa CE.

PLoS One 2013 Dec; 8(12):e83914.

Application: ELISA, Human, Brain, Mesencephalon

- [Nilotinib reverses loss of dopamine neurons and improves motor behavior via autophagic degradation of \$\alpha\$ -synuclein in Parkinsons disease models.](#)

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Human Molecular Genetics 2013 Aug; 22(16):3315.

Application: ELISA, Mouse, Brain extracted