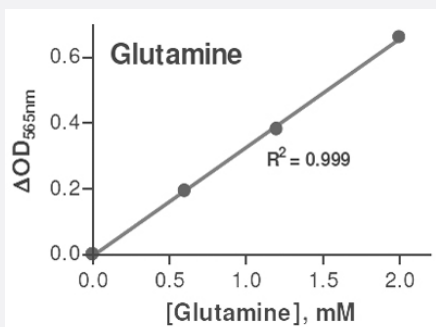


Glutamine Assay Kit

Catalog # KA1627 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	Glutamine Assay Kit is a quantitative colorimetric determination of glutamine at 565 nm.
Suitable Sample	Cell Culture, Plasma, Serum, Tissue, Urine
Sample Volume	20 uL
Detection Method	Colorimetric
Assay Type	Quantitative
Calibration Range	0.023 to 2 mM
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 -20°C.

Applications

- Functional Study

Publication Reference

- [Lobetyolin inhibits cell proliferation and induces cell apoptosis by downregulating ASCT2 in gastric cancer.](#)

Lin Cheng, Haoqing Zhai, Juan Du, Gang Zhang, Gan Shi.

Cytotechnology 2023 Oct; 75(5):435.

Application: Func, Human, MKN-28, MKN-45 cells

- [Neddylation inhibition induces glutamine uptake and metabolism by targeting CRL3 SPOP E3 ligase in cancer cells.](#)

Qiyin Zhou, Wenyu Lin, Chaoqun Wang, Fei Sun, Siwei Ju, Qian Chen, Yi Wang, Yongxia Chen, Haomin Li, Linbo Wang, Zeping Hu, Hongchuan Jin, Xian Wang and Yi Sun.

Nature Communications 2022 May; 13(1):3034.

Application: Quant, Human, human breast cancer

- [ERK is a critical metabolic hub for immunosuppressive function in macrophages.](#)

Lydia N Raines, Haoxin Zhao, Yuzhu Wang, Heng-Yi Chen, Hector Gallart-Ayala, Pei-Chun Hsueh, Wei Cao, Yeojung Koh, Ana Alamonte-Loya, Pu-Ste Liu, Julijana Ivanisevic, Chan-Wang Jerry Lio, Ping-Chih Ho, Stanley Ching-Cheng Huang.

Nature Immunology 2022 Mar; 23(3):431.

Application: Func, Mouse, Mouse macrophages (Mouse bone marrow cells)

- [Silencing of circ_0000517 suppresses proliferation, glycolysis, and glutamine decomposition of non-small cell lung cancer by modulating miR-330-5p/YY1 signal pathway.](#)

Zhong-Xing Bing, Jia-Qi Zhang, Gui-Ge Wang, Yan-Qing Wang, Tian-Ge Wang, Dan-Qing Li.

The Kaohsiung Journal of Medical Sciences 2021 Dec; 37(12):1027.

Application: Func, Quant, Human, A-549, H1299 cells

- [PPP1CA/YAP/GS/Gln/mTORC1 pathway activates retinal Müller cells during diabetic retinopathy.](#)

Yang Guo, Xiaomin Cang, Linling Zhu, Manhui Zhu, Aihong Li, Zhenzhen Wang, Yuting Zhang, Xueqin Wang, E Song.

Experimental Eye Research 2021 Sep; 210:108703.

Application: Quant, Human, MIO-M1 cells

- [Inhibition of the L-glutamine transporter ASCT2 sensitizes plasma cell myeloma cells to proteasome inhibitors.](#)

Monika K Prelowska, Dawid Mehlich, M Talha Ugurlu, Hanna Kedzierska, Aleksandra Cwiek, Artur Kosnik, Klaudia Kaminska, Anna A Marusiak, Dominika Nowis.

Cancer Letters 2021 Jun; 507:13.

Application: Func, Human, RPMI-8226 cells

- [Kidins220/ARMS controls astrocyte calcium signaling and neuron-astrocyte communication.](#)

Jaudon F, Chiacchiaretta M, Albin M, Ferroni S, Benfenati F, Cesca F.

Cell Death and Differentiation 2020 May; 27(5):1505.

Application: Quant, Mouse, Mouse astrocytes

- [BAG3 promotes autophagy and glutaminolysis via stabilizing glutaminase.](#)

Zhao S, Wang JM, Yan J, Zhang DL, Liu BQ, Jiang JY, Li C, Li S, Meng XN, Wang HQ.

Cell Death & Disease 2019 Mar; 10(4):284.

Application: Func, Quant, Human, MCF-7 cells

- [Targeting hepatic glutaminase activity to ameliorate hyperglycemia.](#)

Miller RA, Shi Y, Lu W, Pirman DA, Jatkar A, Blatnik M, Wu H, Cárdenas C, Wan M, Foskett JK, Park JO, Zhang Y, Holland WL, Rabinowitz JD, Birnbaum MJ.

Nature Medicine 2018 May; 24(4):518.

Application: Func, Human, Mouse, Hepatocytes

- [ERK2 Mediates Metabolic Stress Response to Regulate Cell Fate.](#)

Sejeong Shin, Gwen R Buel, Laura Wolgamott, David R Plas, John M Asara, John Blenis, Sang-Oh Yoon.

Molecular Cell 2023 Aug; 59(3):382.

Application: Quant, Human, HKE293 cells

- [Glutamine deprivation enhances antitumor activity of 3-bromopyruvate through the stabilization of monocarboxylate transporter-1.](#)

Cardaci S, Rizza S, Filomeni G, Bernardini R, Bertocchi F, Mattei M, Paci M, Rotilio G, Ciriolo MR.

Cancer Research 2012 Sep; 72(17):4526.

Application: Quant, Human, HeLa cells