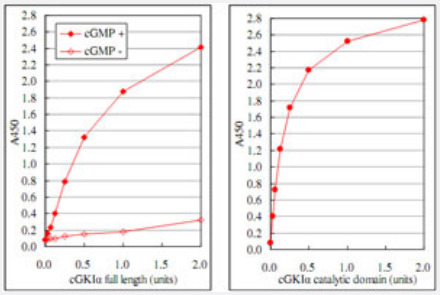
Cyclic GMP dependent protein kinase (cGK) (Human) Assay Kit

Catalog # KA0063 Size 1 Kit

Applications



Dose dependent curve of cGK.

Specification

Product Description	Cyclic GMP dependent protein kinase (cGK) (Human) Assay Kit is a single-site, non-quantitative immunoassay for cGK activity. Plates are pre-coated with a substrate corresponding to recombinant G-kinase substrate, which contains threonine residues that can be phosphorylated by cGK family members, including cGKI and cGKII. The detector antibody specifically reacts with only the phosphorylated form of threonine 68/119 residues on cGK substrate.
Assay Type	Quantitative
Reactivity	Human
Regulation Status	For research use only (RUO)
Quality Control Testing	Dose dependent curve Dose dependent curve of cGK.
Storage Instruction	Store the kit at 4°C.

Applications

- Functional Study

Publication Reference

- Compartmentalization of cardiac beta-adrenergic inotropy modulation by phosphodiesterase type 5.

  Takimoto E, Belardi D, Tocchetti CG, Vahebi S, Cormaci G, Ketner EA, Moens AL, Champion HC, Kass DA.

  Circulation 2007 Apr; 115(16):2159.

  Application: Quant, Mouse , Mouse hearts

- Hemolysis in sickle cell mice causes pulmonary hypertension due to global impairment in nitric oxide bioavailability.

  Hsu LL, Champion HC, Campbell-Lee SA, Bivalacqua TJ, Manci EA, Diwan BA, Schimel DM, Cochard AE, Wang X, Schechter AN, Noguchi CT, Gladwin MT.

  Blood 2007 Apr; 109(7):3088.

  Application: Quant, Mouse, Mouse lung homogenates

- AKT phosphorylation is essential for insulin-induced relaxation of rat vascular smooth muscle cells.

  Lee JH, Ragolia L.

  American Journal of Physiology. Cell Physiology 2006 Dec; 291(6):C1355.

  Application: Func, Rat, Rat vascular smooth muscle cells

- Chronic inhibition of cyclic GMP phosphodiesterase 5A prevents and reverses cardiac hypertrophy.

  Takimoto E, Champion HC, Li M, Belardi D, Ren S, Rodriguez ER, Bedja D, Gabrielson KL, Wang Y, Kass DA.

  Nature Medicine 2005 Feb; 11(2):214.

  Application: Func, Mouse, Heart extracted

- cGMP catabolism by phosphodiesterase 5A regulates cardiac adrenergic stimulation by NOS3-dependent mechanism.

  Takimoto E, Champion HC, Belardi D, Moslehi J, Mongillo M, Mergia E, Montrose DC, Isoda T, Aufiero K, Zaccolo M, Dostmann WR, Smith CJ, Kass DA.

  Circulation Research 2005 Jan; 96(1):100.