

IMPA1 Knockout cell line (HEK293)

Catalog Number: KO07794

Product Information	
Product Name	IMPA1 Knockout cell line (HEK293)
specification	1*10 ⁶
Storage and transportation	Dry ice preservation/T25 live cell transportation.
Cell morphology	Epithelioid, adherent cell
Passage ratio	1:3~1:6
species	Human
Gene	IMPA1
Gene ID	3612
Build method	Electric rotation method / virus method
Mycoplasma testing	Negative
Cultivation system	90%DMEM+10% FBS
Parental Cell Line	HEK293
Quality Control	Genotype: IMPA1 Knockout cell line (HEK293) >95% viability before freezing. All cells were tested and found to be free of bacterial, viruses, mycoplasma and other toxins.

Gene Information	
Gene Official Full Name	inositol monophosphatase 1 provided by HGNC
Also known as	IMP; IMPA; MRT59
Gene Description	This gene encodes an enzyme that dephosphorylates myo-inositol monophosphate to generate free myo-inositol, a precursor of phosphatidylinositol, and is therefore an important modulator of intracellular signal transduction via the production of the second messengers myoinositol 1,4,5-trisphosphate and diacylglycerol. This enzyme can also use myo-inositol-1,3-diphosphate, myo-inositol-1,4-diphosphate, scyllo-inositol-phosphate, glucose-1-phosphate, glucose-6-phosphate, fructose-1-phosphate, beta-glycerophosphate, and 2'-AMP as substrates. This enzyme shows magnesium-dependent phosphatase activity and is inhibited by therapeutic concentrations of lithium. Inhibition of inositol monophosphate hydrolysis and subsequent depletion of inositol for phosphatidylinositol synthesis may explain the anti-manic and anti-depressive effects of lithium administered to treat bipolar disorder. Alternative splicing results in multiple transcript variants encoding distinct isoforms. A pseudogene of this gene is also present on chromosome 8q21.13.

	[provided by RefSeq, Dec 2014]
Expression	Ubiquitous expression in testis (RPKM 15.5), thyroid (RPKM 10.4) and 24 other tissues See more