Product Name	:	Pelargonidin chloride
Synonyms	:	——
Cat No.	:	M22667
CAS Number	:	134-04-3
Molecular Formula	:	C15H11ClO5
Formula Weight	:	306.7
Chemical Name	:	——
Description	:	Pelargonidin chloride shows protective effect against CTN-induced oxidative stress in HepG2 cells and up-regulated the activity of detoxification enzyme levels through Keap1/Nrf2 signaling pathway.The effect of PC in ameliorating citrinin (CTN) induced cytotoxicity and oxidative stress. The cytotoxicity of CTN was evaluated by treating HepG2 (Human hepatocellular carcinoma) cells with CTN (0-150 μM) in a dose dependent manner for 24 h, and the IC50 was determined to be 96.16 μM. CTN increased lactate dehydrogenase leakage (59%), elevated reactive oxygen species (2.5-fold), depolarized mitochondrial membrane potential as confirmed by JC-1 monomers and arrested cell cycle at G2/M phase. Further, apoptotic and necrotic analysis revealed significant changes followed by DNA damage. To overcome these toxicological effects, PC was pretreated for 2 h followed by CTN exposure for 24 h. Pretreatment with PC resulted in significant increase in cell viability (84.5%), restored membrane integrity, reactive oxygen species level were maintained and cell cycle phases were normal. PC significantly up-regulated the activity of detoxification enzymes: heme oxygenase 1 (HO-1), glutathione transferase, glutathione peroxidase, superoxide dismutase and quinone reductase. Nrf2 translocation into the nucleus was also observed by immunocytochemistry analysis.
Pathway	:	Immunology/Inflammation
Target	:	NOS
Receptor	:	NO Synthase;NOS;Nrf2
Solubility	:	——
SMILES	:	[Cl-].Oc1ccc(cc1)-c1[o+]c2cc(O)cc(O)c2cc1O
Storage	:	(-20℃)
Stability	:	≥ 2 years
Reference	:	

1. Pelargonidin Modulates Keap1/Nrf2 Pathway Gene Expression and Ameliorates Citrinin-Induced Oxidative Stress in HepG2 Cells.Frontiers in Pharmacology, 2017, 8:868.