

Product Data Sheet

Cas No.:	3522-50-7	Cat. No:	PL05715	
Product Name:		Ferric citrate		
Product synonym:	柠檬酸铁;柠檬酸铁(III)水合物;柠檬酸亚铁;食用柠檬酸;枸橼酸铁;柠檬酸三铁;柠檬酸铁(III);柠檬酸铁,Ferric citrate,AR;柠 檬酸铁,Ferric citrate,细胞培养级			
Chemical name:		Ferric citrate		
MF:	C6H5FEO7	FW:	244.9447	
Purity:	≥98%	Batch No.:	-	
Storage:				
Structural formula:				
λmax:	-	Formulation:	-	
Solubility :				
SMILES :	[Fe+3].O([H])C(C(=O)[O-])(C([H])([H])C(=O)[O-])C([H])([H])C(=O)[O-]			
InChl Code:		-		
InChl Key:				
WARNING This product is not for human or veterinary use.				

Product Description

Ferric citrate (Iron(III) citrate), 一种具有口服活性的铁补充剂, 是一种有效的磷酸盐结合剂。Ferric citrate 可用于缺铁性贫血和慢性肾病 (CKD)的研 究。

生物活性	Ferric citrate (Iron(III) citrate), an orally active iron supplement, is an efficacious phosphate binder. Ferric citratee can be used for iron deficiency anemia and chronic kidney disease (CKD) research.	
体外研究(In Vitro)	Ferric citrate (Iron(III) citrate; 1 mM; 24 hours) significantly induces CM cell death. Ferric citrate (Iron(III) citrate; 0.1 mM, 1 mM, 2 mM; 24 hours) increases ROS generation in cardiomyocyte (CM) cells in a dose- dependent manner. has not independently confirmed the accuracy of these methods. They are for reference only.Cell Viability Assay	

体内研究(In Vivo)	Here we compared the effects of Ferric citrate (25 µg/g) administration versus a mineral sufficient control diet using the Col4a3 knockout mouse model of progressive CKD and age-matched wild-type mice. Ferric citrate is given to knockout mice for four weeks beginning at six weeks of age when they had overt chronic kidney disease (CKD), or for six weeks beginning at four weeks of age when they had early CKD. Ferric citrate rescues iron deficiency and anemia in knockout mice regardless of the timing of treatment initiation, and circulating levels and bone expression of FGF23 are reduced. Ferric citrate also improves cardiac function and significantly improves survival.	
	function and significantly improves survival. Ferric citrate is an efficacious and safe phosphate binder that increases iron stores and reduces intravenous iron and erythropoietin-stimulating agent use while maintaining hemoglobin. Ferric citrate can incr	
包装储存	4°C, sealed storage, away from moistur In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)	
溶解度数据	In Vitro: H ₂ O : 5 mg/mL (20.41 mM; ultrasonic and warming and heat to 60°C)配制储备液	