Dasiglucagon acetate

Cat. No.:	HY-P3469A
Molecular Formula:	$C_{154}H_{226}N_{38}O_{52}$
Molecular Weight:	3441.67
Sequence Shortening:	HSQGTFTSDYSKYLD{Aib}ARAEEFVKWLEST (acetate)
Target:	Others
Pathway:	Others
Storage:	Sealed storage, away from moisture and light, under nitrogen

HSQGTFTSDYSKYLD{Aib}ARAEEFVKWLEST (acetate)

Powder   -80°C   2 years

          -20°C   1 year

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light, under nitrogen)

SOLVENT & SOLUBILITY

In Vitro	H_2O : 16.67 mg/mL (4.84 mM; ultrasonic and adjust pH to 3 with HCl)

Preparing Stock Solutions	Solvent / Mass Concentration	1 mg	5 mg	10 mg
	1 mM	0.2906 mL	1.4528 mL	2.9056 mL
	5 mM	---	---	---
	10 mM	---	---	---

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description	Dasiglucagon acetate is a human glucagon analog, and can increase plasma glucose. Dasiglucagon can be used in hypoglycemia research[1][2][3].

In Vivo	Dasiglucagon PK profile shows a dose-dependent and rapid increase in plasma levels[2].

	Dasiglucagon dose			
	0.1 mg	0.3 mg	0.6 mg	1.0 mg
N	5	16	16	16
$AUC_{0-30min}$ (pmol*h/L)	99.4 (32.0)	302 (78.9)	444 (163)	884 (307)

$AUC_{0-360min}$ (pmol*h/L)	451 (123)	1360 (166)	1630 (368)	4800 (697)
AUC_{0-inf} (pmol*h/L)	451 (123)	1360 (166)	2640 (365)	4810 (696)
C_{max} (pmol/L)	334 (113)	976 (208)	1570 (445)	2800 (767)
t_{max} (h)	0.50 (0.5-0.6)	0.63 (0.3-0.8)	0.58 (0.5-1.7)	0.63 (0.3-0.8)
$t_{1/2}$ (h)	0.43 (0.07)	0.43 (0.07)	0.49 (0.14)	0.54 (0.17)

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Bo Xu, et al. Dasiglucagon: an effective medicine for severe hypoglycemia. Eur J Clin Pharmacol. 2021 Dec;77(12):1783-1790.

[2]. Ulrike Hövelmann, et al. Pharmacokinetic and Pharmacodynamic Characteristics of Dasiglucagon, a Novel Soluble and Stable Glucagon Analog. Diabetes Care. 2018 Mar;41(3):531-537.

[3]. Yongjing Ju, et al. Dasiglucagon for treating severe hypoglycemia in patients with diabetes. Expert Rev Clin Pharmacol. 2022 Jul;15(7):799-803.