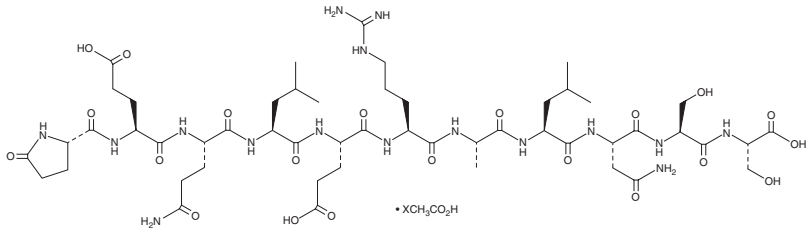
PRODUCT INFORMATION

ARA 290 (acetate)

Item No. 34943

Formal Name: 5-oxo-L-prolyl-L-α-glutamyl-L-glutaminyl-L-leucyl-L-α-glutamyl-L-arginyl-L-alanyl-L-leucyl-L-asparaginyl-L-seryl-L-serine, acetate
Synonyms: Cibinetide, PHBSP, Pyroglutamate HBSP, Pyroglutamate Helix B Surface Peptide
MF: $C_{51}H_{84}N_{16}O_{21} \bullet XC_2H_4O_2$
FW: 1,257.3
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

ARA 290 (acetate) is supplied as a solid. A stock solution may be made by dissolving the ARA 290 (acetate) in the solvent of choice, which should be purged with an inert gas. ARA 290 (acetate) is soluble in the organic solvent DMSO at a concentration of approximately 5 mg/ml.

Description

ARA 290 is a derivative of erythropoietin (EPO).[1] *In vivo*, ARA 290 (0.8 and 8 nmol/kg, i.p.) reduces plasma creatine, urea, and aspartate aminotransferase (AST) levels, markers of renal dysfunction, in a rodent model of renal ischemia-reperfusion injury. It decreases wound area in a rat model of punch biopsy-induced dermal injury and a rat model of decubitus ulcer.[2] ARA 290 (30 µg/kg, i.p.) reduces the latency to find the platform in the Morris water maze in a rat model of cortical impact-induced traumatic brain injury (TBI).[3] It also reduces tactile allodynia in a rat model of neuropathic pain induced by spinal nerve injury (SNI).[4]

References

1. Brines, M., Patel, N.S.A., Villa, P., *et al.* Nonerythropoietic, tissue-protective peptides derived from the tertiary structure of erythropoietin. *Proc. Natl. Acad. Sci. USA* **105(31)**, 10925-10930 (2008).
2. Erbayraktar, Z., Erbayraktar, S., Yilmaz, O., *et al.* Nonerythropoietic tissue protective compounds are highly effective facilitators of wound healing. *Mol. Med.* **15(7-8)**, 235-241 (2009).
3. Robertson, C.S., Garcia, R., Gaddam, S.S.K., *et al.* Treatment of mild traumatic brain injury with an erythropoietin-mimetic peptide. *J. Neurotrauma* **30(9)**, 765-774 (2013).
4. Swartjes, M., Niesters, M., and Dahan, A. Assessment of allodynia relief by tissue-protective molecules in a rat model of nerve injury-induced neuropathic pain. *Methods Mol. Biol.* **982**, 187-195 (2013).

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