

Prokineticin

Overview: Prokineticin receptors (provisional nomenclature, see Foord *et al.*, 2005) respond to the cysteine-rich 81–86 amino-acid peptides prokineticin 1 (PROK1, also known as endocrine-gland-derived vascular endothelial growth factor, mambakine, ENSG00000143125) and prokineticin 2 (PROK2, protein Bv8 homologue, ENSG00000163421). An orthologue of PROK1 from black mamba (*Dendroaspis polylepis*) venom, mamba intestinal toxin 1 (MIT1, Schweitz *et al.*, 1999) is a potent, non-selective agonist at prokineticin receptors (Masuda *et al.*, 2002), while Bv8, an orthologue of PROK2 from amphibians (*Bombina sp.*, Mollay *et al.*, 1999), is equipotent at recombinant PK₁ and PK₂ receptors (Negri *et al.*, 2005), and has high potency in macrophage chemotaxis assays, which are lost in PK₁-null mice (Martucci *et al.*, 2006).

Nomenclature	PK ₁	PK ₂
Other names	PK-R1, GPR73 (Lin <i>et al.</i> , 2002; Soga <i>et al.</i> , 2002), G protein-coupled receptor ZAQ (Masuda <i>et al.</i> , 2002)	PK-R2, GPR73a (Lin <i>et al.</i> , 2002), GPRg2 (Soga <i>et al.</i> , 2002), ISE (Masuda <i>et al.</i> , 2002)
Ensembl ID	ENSG00000169618	ENSG00000101292
Principal transduction	G _{q/11} (Lin <i>et al.</i> , 2002; Masuda <i>et al.</i> , 2002)	G _{q/11} (Lin <i>et al.</i> , 2002; Masuda <i>et al.</i> , 2002)
Rank order of potency	PROK2 ≥ PROK1 (Lin <i>et al.</i> , 2002; Masuda <i>et al.</i> , 2002; Soga <i>et al.</i> , 2002)	PROK2 ≥ PROK1 (Lin <i>et al.</i> , 2002; Masuda <i>et al.</i> , 2002; Soga <i>et al.</i> , 2002)

Abbreviations: PROK1, prokineticin 1; PROK2, prokineticin 2

Further Reading

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References

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