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DATASHEET

P4pal10

Product overview

Name	P4pal10
Cat No	HB8677
Biological description	PAR_4 antagonist which shows no agonist activity (as measured by platelet aggregation, intracellular Ca^{2+} release or InsP production). Also inhibits $G_{\alpha i}$-coupled formylpeptide FPR2 receptor downstream signaling but does not inhibit downstream signaling of the $G_{\alpha q}$-coupled P2Y2 and PAF receptors. Additionally activates the FFAR2 short chain fatty acid receptor. Inhibits platelet aggregation and shows cardioprotective effects by decreasing infarct size before ischemia.
Alternative names	Pepducin
Biological action	Antagonist
Purity	>95%
Description	PAR_4 antagonist. Inhibits platelet aggregation.

Solubility & Handling

Storage instructions	-20°C
Solubility overview	Soluble in DMSO
Storage of solutions	Prepare and use solutions on the same day if possible. Store solutions at -20°C for up to one month if storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.
Shipping Conditions	Stable for ambient temperature shipping. Follow storage instructions on receipt.
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use

Chemical Data

Molecular Weight	1409.72
Molecular Formula	$C_{65}H_{112}N_{22}O_{13}$
Sequence (one letter)	Pal-SGRRYGHALR-NH2
Sequence (three letter)	Pal-Ser-Gly-Arg-Arg-Tyr-Gly-His-Ala-Leu-Arg-NH2
Modifications	C terminal palmitoylation, N terminal amide
CAS Number	1021346-05-3
PubChem identifier	447463598

References

Pepducin-based intervention of thrombin-receptor signaling and systemic platelet activation.

Covic L et al (2002) Nature medicine 8
PubMedID 12357249

Inhibiting protease-activated receptor 4 limits myocardial ischemia/reperfusion injury in rat hearts by unmasking adenosine signaling.

Strande JL et al (2008) The Journal of pharmacology and experimental therapeutics 324
PubMedID 18055876

The PAR4-derived pepducin $P4Pal_{10}$ lacks effect on neutrophil GPCRs that couple to Gαq for signaling but distinctly modulates function of the Gαi-coupled FPR2 and FFAR2.

Holdfeldt A et al (2020) Biochemical pharmacology 180
PubMedID 32653592