



SDI Review Form 1.6

PART 1:

Journal Name:	<u>International Journal of Biochemistry Research & Review</u>
Manuscript Number:	2013_IJBcRR_5593
Title of the Manuscript:	Peptides Corresponding to Intracellular Regions of GPCR as a New Generation of Selective Drugs
Type of the Article	Review

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 7 parts. Kindly note that you should use all the parts of this review form.



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PART 2: Review Comments

	Reviewer's comment This review describes recent advances in the development of GPCR-peptides derived from receptor intracellular domains, and their use in treatment of vascular diseases, cancers, inflammation, and endocrine dysfunctions. It is interesting review. the following sections should be inserted in the article -Mechanism of Action of GPCR-peptides: directly modify G-proteins stabilization of the GPCR-G-protein complex, Direct binding between an allosteric agonist and receptor, participating in homo- or heterodimer interactions etc - off-target effects of GPCR-peptides specially among close family members .	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i> An additional section under the title "Mechanisms of action of GPCR-peptides" plus 15 extra references are included in the text. The off-target effects of GPCR-peptides are discussed in connection with receptor, G protein and tissue specificity of GPCR-peptides. Indeed, a number of GPCR-peptides can be not active, or be characterized by adverse effects, especially when used at the concentrations higher than 100 uM. Many such things occurred in our investigations. In the present review, the emphasis is put on effective GPCR-peptides that can be applied in medicine (their ineffective counterparts are also discussed, but in brief, for example, in Sections 5 and 6). The proposal to summarize and analyze the cases when GPCR-peptides are inactive or have adverse effects, is highly interesting and may be the subject of a special review. Regrettably, a majority of the authors
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		(including us) do not have or do not describe in detail the cases when GPCR-peptide is not active or non-specific. So it is difficult to summarize such information.
<u>Compulsory</u> REVISION comments		
<u>Minor</u> REVISION comments	It would be better to demonstrate couple of mode of action of GPCR-peptide with an illustration	The new section "Mechanisms of action of GPCR-peptides" provides a detailed description of the mechanism of action of GPCR-peptides, which to some extent compensates a desirable illustration.
<u>Optional/General</u> comments		