

Title (en)  
COMBINATIONS OF IKK /TBK1 INHIBITORS WITH BETA ADRENERGIC AGONISTS OR SYMPATHETIC NERVOUS SYSTEM ACTIVATORS

Title (de)  
KOMBINATIONEN VON IKK/TBK1-INHIBITOREN MIT BETA-ADRENERGISCHEN AGONISTEN ODER AKTIVATOREN DES SYMPATHISCHEN NERVENSYSTEMS

Title (fr)  
COMBINAISONS D'INHIBITEURS DE IKK /TBK1 AVEC DES AGONISTES BÊTA-ADRÉNERGIQUES OU DES ACTIVATEURS DE SYSTÈME NERVEUX SYMPATHIQUE

Publication  
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Application  
**EP 14881460 A 20140207**

Priority  
US 2014015387 W 20140207

Abstract (en)  
[origin: WO2015119624A1] Provided herein are methods of treating obesity and obesity-related conditions comprising the administration of combinations of IKK $\epsilon$ /TBK1 inhibitors with beta adrenergic agonists or sympathetic nervous system activators, and pharmaceutical compositions comprising such combinations. Obesity generates a state of chronic, low-grade inflammation in liver and adipose tissue accompanied by macrophage infiltration and the local secretion of inflammatory cytokines and chemokines that attenuate insulin action.

IPC 8 full level  
**A61K 31/436** (2006.01); **A61K 31/137** (2006.01); **A61K 31/36** (2006.01); **A61K 31/4184** (2006.01); **A61K 45/06** (2006.01); **A61P 1/16** (2006.01); **A61P 3/04** (2006.01); **A61P 3/10** (2006.01)

CPC (source: EP)  
**A61K 31/137** (2013.01); **A61K 31/36** (2013.01); **A61K 31/4184** (2013.01); **A61K 31/436** (2013.01); **A61K 45/06** (2013.01); **A61P 1/16** (2017.12); **A61P 3/04** (2017.12); **A61P 3/06** (2017.12); **A61P 3/10** (2017.12); **A61P 43/00** (2017.12)

C-Set (source: EP)  
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2. **A61K 31/137 + A61K 2300/00**  
3. **A61K 31/4184 + A61K 2300/00**  
4. **A61K 31/36 + A61K 2300/00**

Citation (search report)  

- [X] WO 2010139985 A1 20101209 - BIOCOPEA LTD [GB], et al
- [XYI] JONATHAN MOWERS ET AL: "Inflammation produces catecholamine resistance in obesity via activation of PDE3B by the protein kinases IKK[epsilon] and TBK1", ELIFE, vol. 2, 24 December 2013 (2013-12-24), pages e01119 - 1, XP055219656, DOI: 10.7554/eLife.01119
- [Y] J. G. KANG ET AL: "Randomized controlled trial to investigate the effects of a newly developed formulation of phentermine diffuse-controlled release for obesity", DIABETES, OBESITY AND METABOLISM, vol. 12, no. 10, 29 October 2010 (2010-10-29), pages 876 - 882, XP055337209, ISSN: 1462-8902, DOI: 10.1111/j.1463-1326.2010.01242.x
- See references of WO 2015119624A1

Designated contracting state (EPC)  
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