Therapeutic for Tissue Fibrosis

OCR Number: OCR 7100

Description:

- **MKP-5 Allosteric modulation: anti-fibrotic therapeutics**

  - About MKP-5 expression/indications
    - Liver, sk. muscle, lung, hematopoietic system and vasculature
    - MKP-5 antagonism for multiple fibrotic indications
    - MKP-5 is safely KO'd
    - MKP-5 family & pathway well-characterized/TGFβ-1
    - MKP-5 upregulated with chronic muscle damage/ Duchenne muscular dystrophy (DMD)

  - Available assays/in vivo models
    - In vitro: assays for efficient lead identification/selection
    - In vivo DMD/MDX model: MDX/MKP-5 KO blocks progression of DMD

  - About the hit/Structure-based design
    - OCR7100 is a µM allosteric modulator
    - OCR7100 is selective for MKP-5 (vs. MKP-1 & MKP-3)
    - OCR7100 has been co-crystallized with MKP-5

  - Novelty/surprising result
    - New compositions of matter by design
    - Mechanism of inhibition is allosteric, not active site

- **OCR7100 IP Status:**
  - Unpublished
  - Provisional patent filed
  - Both available under CDA

**Publications:**

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