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(54) Title: APOPTOSIS SIGNAL-REGULATING KINASE INHIBITORS

(57) Abstract: The present application relates to compounds having the inhibitory activity to apoptosis signal-regulating kinase (ASK1), thus are thus useful in treating ASK1-mediated conditions, including autoimmune disorders, inflammatory diseases, cardiovascular diseases, diabetes, diabetic nephropathy, cardio-renal diseases, including kidney disease, fibrotic diseases, respiratory diseases, COPD, idiopathic pulmonary fibrosis, acute lung injury, acute and chronic liver diseases, and neurodegenerative diseases.