

ABSTRACT

The present invention relates to a heteroaryl derivative or a pharmaceutically acceptable salt thereof, a preparation method therefor, and a pharmaceutical composition for preventing or treating diseases associated with PI3 kinases, containing the same as an active ingredient. The heteroaryl derivative according to the present invention has an excellent effect of selectively inhibiting PI3 kinases, thereby being useful in preventing or treating PI3 kinase diseases such as: cancers such as hematologic malignancy, ovarian cancer, uterine cervical cancer, breast cancer, colorectal cancer, liver cancer, gastric cancer, pancreatic cancer, colon cancer, peritoneal metastatic cancer, skin cancer, bladder cancer, prostate cancer, lung cancer, osteosarcoma, fibrous tumors, and brain tumors; autoimmune diseases such as rheumatoid arthritis, systemic lupus erythematosus, multiple sclerosis, diabetes mellitus, hyperthyroidism, myasthenia, Crohn's disease, ankylosing spondylitis, autoimmune pernicious anemia, and Sjogren's syndrome; and respiratory diseases such as chronic obstructive pulmonary disease (COPD), rhinitis, asthma, chronic

bronchitis, chronic pulmonary inflammatory diseases,
silicosis, pulmonary sarcoidosis, pleurisy,
alveolitis, angitis, pneumatosis, pneumonia, and
bronchiectasis.

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