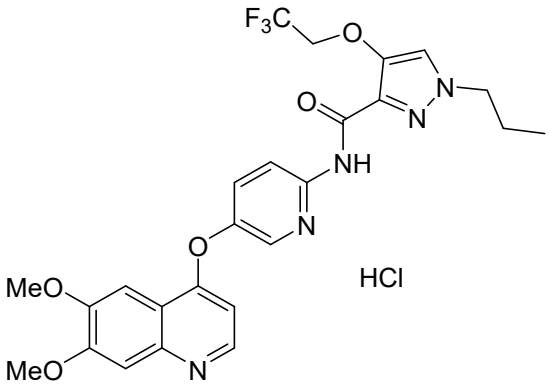
Claims

1. Compound N-(5-((6,7-dimethoxyquinolin-4-yl)oxy)pyridin-2-yl)-1-propyl-4-(2,2,2-trifluoroethoxy)-1H-pyrazole-3-carboxamide hydrochloride

having the formula



and having at least one or several peaks from a first set of peaks in an X-ray Powder Diffraction (XRPD) spectrum obtained by irradiation with Cu-Kα – radiation (Cu-Kα), said first set of peaks being:

> 8.2 ° 2θ, 9.9° 2θ, 11.4 ° 2θ, 15.2° 2θ, 15.4 ° 2θ, 19.9 ° 2θ, 21.4 ° 2θ, 21.7 ° 2θ, 22.9 ° 2θ, 23.3 ° 2θ, 25.5 ° 2θ, 25.7 ° 2θ, 25.9 ° 2θ, 28.2 ° 2θ, and 28.7 ° 2θ, ± 0.2 ° 2θ;

wherein, preferably, said compound has at least two peaks, at least three peaks, at least four peaks, at least five peaks, at least six peaks or more peaks from said first set of peaks ("form A" of N-(5-((6,7-dimethoxyquinolin-4-yl)oxy)pyridin-2-yl)-1- propyl-4-(2,2,2-trifluoroethoxy)-1H-pyrazole-3-carboxamide hydrochloride).

2. The compound according to claim 1, having at least two peaks from a second set of peaks in an X-ray Powder Diffraction (XRPD) spectrum obtained by irradiation with Cu-K Kα – radiation (Cu-Kα), said second set of peaks being:

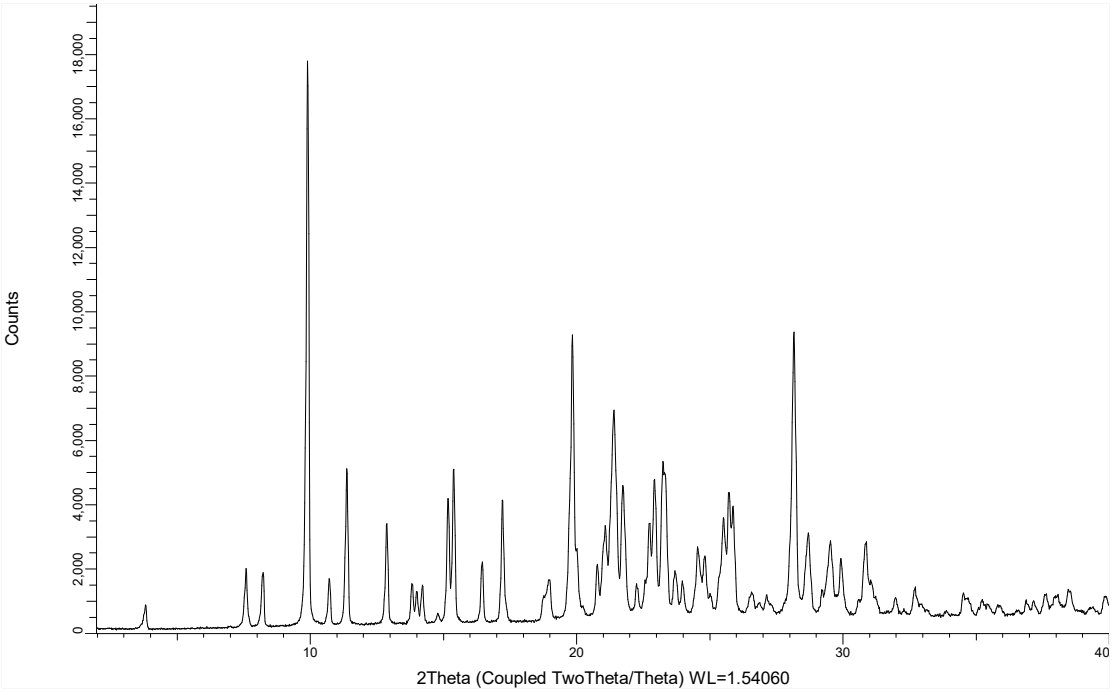
> 3.8 ° 2θ, 7.6 ° 2θ, 10.7 ° 2θ, 12.9 ° 2θ, 16.5 ° 2θ, 17.2 ° 2θ, 24.6 ° 2θ, 24.8 ° 2θ, 29.5 ° 2θ, 29.9 ° 2θ, and 31.1 ° 2θ, ± 0.2 ° 2θ;

wherein, preferably, said compound has at least three peaks or at least four peaks from said second set of peaks ("form A" of N-(5-((6,7-dimethoxyquinolin-

4-yl)oxy)pyridin-2-yl)-1- propyl-4-(2,2,2-trifluoroethoxy)-1H-pyrazole-3-carboxamide hydrochloride).

3. The compound according to any of claims 1 – 2, wherein said compound has all of the peaks from said first set of peaks and/or from said second set of peaks ("form A" of N-(5-((6,7-dimethoxyquinolin-4-yl)oxy)pyridin-2-yl)-1-propyl-4-(2,2,2-trifluoroethoxy)-1H-pyrazole-3-carboxamide hydrochloride).

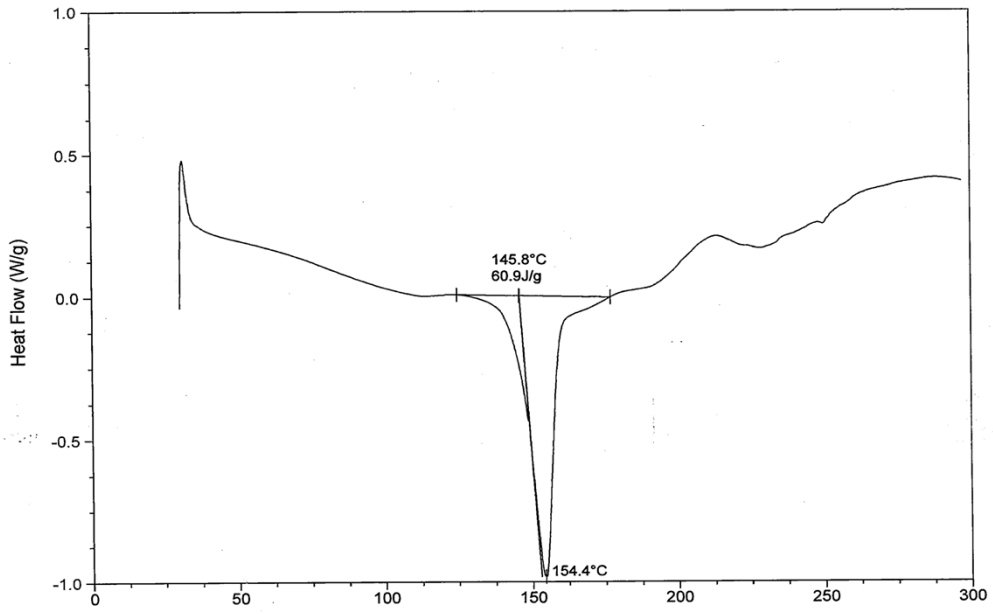
4. The compound according to any of the foregoing claims having an XRPD spectrum obtained by irradiation with Cu-Kα – radiation (Cu-Kα) and as shown hereafter ("form A" of N-(5-((6,7-dimethoxyquinolin-4-yl)oxy)pyridin-2-yl)-1- propyl-4-(2,2,2-trifluoroethoxy)-1H-pyrazole-3-carboxamide hydrochloride):



5. The compound according to any of the foregoing claims, having a differential scanning calorimetry (DSC) thermogram showing an endotherm having an onset temperature in the range of from 115 °C to 150 °C, preferably in the range of from 135 °C to 148 °C, more preferably in the range of from 135 °C to 146 °C, even more preferably in the range of from 140 °C to 146 °C, even more

preferably in the range of from 144 °C to 146 °C, even more preferably at approximately 145 °C, most preferably at approximately 145.8 °C.

6. The compound according to claim 5, having a differential scanning calorimetry (DSC) thermogram as shown hereafter:



7. The compound according to any of the foregoing claims, being produced by a method comprising the steps:
   - Providing, in any order, a defined amount of N-(5-((6,7-dimethoxyquinolin-4-yl)oxy)pyridin-2-yl)-1- propyl-4-(2,2,2-trifluoroethoxy)-1H-pyrazole-3-carboxamide free base and a defined amount of hydrochloric acid, such that said free base and said hydrochloric acid are provided in a stoichiometric ratio of 1:1;
   - dissolving the freebase in a suitable solvent or solvent mixture, selected from methanol, ethanol, tetrahydrofuran (THF), acetone, water and a mixture of water with any of methanol, ethanol, tetrahydrofuran (THF) and acetone; and, optionally, adding 1 – 5 reaction volumes of water;
   - adding approximately half of the defined amount of said hydrochloric acid;
   - Adding a seeding amount of form A of N-(5-((6,7-dimethoxyquinolin-4-yl)oxy)pyridin-2-yl)-1- propyl-4-(2,2,2-trifluoroethoxy)-1H-pyrazole-3-

carboxamide hydrochloride, as defined in any of claims 1 - 4; thereby promoting formation and precipitation of form A;

- Adding the other half of the defined amount of said hydrochloric acid over a period of from 30 min to 5 h;
- Stirring for a defined period of from 30 min to 2h, preferably from 30 min to 1h;
- Adding water in an amount of 5 to 15 reaction volumes, preferably approximately 10 reaction volumes, over a period of 1 – 20 h, preferably over a period of 2 – 10 h;.

optionally isolating precipitated form A, preferably by filtration, sieving or solvent evaporation.

8. A method for making the compound as defined in any of claims 1 - 7, said method comprising the steps:
   - Providing, in any order, a defined amount of N-(5-((6,7-dimethoxyquinolin-4-yl)oxy)pyridin-2-yl)-1- propyl-4-(2,2,2-trifluoroethoxy)-1H-pyrazole-3-carboxamide free base and a defined amount of hydrochloric acid, such that said free base and said hydrochloric acid are provided in a stoichiometric ratio of 1:1;
   - dissolving the freebase in a suitable solvent or solvent mixture, selected from methanol, ethanol, tetrahydrofuran (THF), acetone, water and a mixture of water with any of methanol, ethanol, tetrahydrofuran (THF) and acetone; and, optionally, adding 1 – 5 reaction volumes of water;
   - adding approximately half of the defined amount of said hydrochloric acid;
   - Adding a seeding amount of form A of N-(5-((6,7-dimethoxyquinolin-4-yl)oxy)pyridin-2-yl)-1- propyl-4-(2,2,2-trifluoroethoxy)-1H-pyrazole-3-carboxamide hydrochloride, as defined in any of claims 1 - 4; thereby promoting formation and precipitation of form A;
   - Adding the other half of the defined amount of said hydrochloric acid over a period of from 30 min to 5 h;
   - Stirring for a defined period of from 30 min to 2 h, preferably from 30 min to 1h;

- Adding water in an amount of 5 to 15 reaction volumes, preferably approximately 10 reaction volumes, over a period of 1 – 20 h, preferably over a period of 2 – 10 h;.
- optionally isolating precipitated form A, preferably by filtration, sieving or solvent evaporation.

9. A pharmaceutical composition comprising at least one compound according to any of claims 1-7, together with at least one pharmaceutically acceptable carrier, excipient and/or diluent.

10. The pharmaceutical composition according to claim 9, further comprising at least one other pharmaceutically active agent.

11. Use of the compound according to any of claims 1-7 or the pharmaceutical composition according to any of claims 9 - 10, in the manufacture of a medicament for the treatment of a disorder selected from hyperproliferative disorders, inflammatory disorders and neurodegenerative disorders.

12. The use according to claim 11, wherein said hyperproliferative disorder is a cancer, preferably a cancer selected from adenocarcinoma, acoustic neuroma, acute lymphoblastic leukemia, acute myeloid leukemia, adrenocortical carcinoma, aids-related cancers, aids-related lymphoma, anal cancer, appendix cancer, astrocytomas, atypical teratoid/rhabdoid tumor, ampullary carcinoma, basal cell carcinoma, bile duct cancer, bladder cancer, bone cancer, osteosarcoma and malignant fibrous histiocytoma, brain stem glioma, brain tumor, central nervous system atypical teratoid/rhabdoid tumor, craniopharyngioma, ependymoblastoma, ependymoma, medulloblastoma, medulloepithelioma, pineal parenchymal tumors of intermediate differentiation, supratentorial primitive neuroectodermal tumors and pineoblastoma, brain and spinal cord tumors, breast cancer, urachal tumors, burkitt lymphoma, carcinoid tumor, choroidal melanoma, gastrointestinal cancer, central nervous system lymphoma, cervical cancer, corpus cancer, chordoma, chronic lymphocytic leukemia, chronic myelogenous leukemia,

chronic myeloproliferative disorders, colon cancer, colorectal cancer, cutaneous t-cell lymphoma, desmoid tumor, mycosis fungoides, endometrial cancer, esophageal cancer, esthesioneuroblastoma, Ewing sarcoma family of tumors, extracranial germ cell tumor, extragonadal germ cell tumor, extrahepatic bile duct cancer, ear tumors, intraocular melanoma, retinoblastoma, gallbladder cancer, gastric cancer, gastrointestinal carcinoid tumor, gastrointestinal stromal tumor, gastrointestinal stromal cell tumor, gynecologic tumors, ovarian germ cell tumor, gestational trophoblastic tumor, glioma, gallbladder carcinomas, hairy cell leukemia, head and neck cancer, heart cancer, hepatocellular cancer, histiocytosis, hypopharyngeal cancer, hematologic neoplasias, islet cell tumors (endocrine pancreas), renal cell cancer, kidney cancer, langerhans cell histiocytosis, laryngeal cancer, leukemia, lip and oral cavity cancer, liver cancer, lung cancer, non-small cell lung cancer, small intestinal tumors, small cell lung cancer, hodgkin lymphoma, non-hodgkin lymphoma, primary central nervous system lymphoma, macroglobulinemia, malignant fibrous histiocytoma of bone and osteosarcoma, melanoma, merkel cell carcinoma, mesothelioma, metastatic squamous neck cancer with occult primary, spinalioms, multiple endocrine neoplasia syndromes, myelodysplastic syndromes, myelodysplastic/myeloproliferative neoplasms, myeloid leukemia, multiple myeloma, myeloproliferative disorders, nasal cavity and paranasal sinus cancer, nasopharyngeal cancer, neuroblastoma, oral cavity cancer, oropharyngeal cancer, osteosarcoma and malignant fibrous histiocytoma of bone, ovarian cancer, ovarian epithelial cancer, ovarian low malignant potential tumor, oligodendroglioma, plasmacytomas, pancreatic cancer, papillomatosis, parathyroid cancer, penile cancer, pharyngeal cancer, pituitary tumor, plasma cell neoplasm/multiple myeloma, pleuropulmonary blastoma, prostate cancer, rectal cancer, renal cell cancer, transitional cell cancer, respiratory tract cancer, rhabdomyosarcoma, salivary gland cancer, sarcoma, skin testis cancer, ewing sarcoma, kaposi sarcoma, uterine sarcoma, non-melanoma skin cancer, melanoma skin cancer, skin carcinoma, small intestine cancer, soft tissue sarcoma, squamous cell carcinoma, squamous neck cancer, stomach cancer, soft tissue tumors, testicular cancer, throat cancer, thymoma and thymic carcinoma, thyroid

cancer, transitional cell cancer of the renal pelvis and ureter, trophoblastic tumor, testicle cancer, gestational cancer, urologic tumors, ureter and renal pelvis cancer, urethral cancer, urothelial carcinoma, uterine cancer, vaginal cancer, vulvar cancer, waldenström macroglobulinemia and wilms tumor, tumors that cause effusions in potential spaces of the body, pleural effusions, pericardial effusions, peritoneal effusion aka ascites, giant cell tumor (GCT), GCT of bone, pigmented villonodular synovitis (PVNS), tenosynovial giant cell tunor (TGCT), TGCT of tendon sheath (TGCT-TS).

13. The use according to claim 11, wherein said inflammatory disorder is selected from osteoarthritis, inflammatory bowel syndrome, tramsplant rejection, systemic lupus erythematosis, ulcerative colitis, crohn's disease, chronic obstructive pulmonary disease, emphysema, Kawasaki's Disease, hemophagocytic syndrome (macrophage activation syndrome), multicentric reticulohistiocytosis, atherosclerosis, primary progressive multiple sclerosis, tenpsy Type I diabetes, Type Il diabetes, insulin resistance, hyperglycemia, obesity, lipolysis, hypcreosinophilia, osteoporosis, increased risk of fracture, Paget's disease, hypercalcemia, infectionmediated osteolysis (e.g. osteomyelitis), peri-prosthetic or wear-debris-mediated osteolysis, endometriosis, inflammatory pain, chronic pain, and bone pain.

14. The use according to claim 11, wherein said neurodegenerative disorder is selected from Binswanger type dementia, prosencephaly, microcephaly, cerebral palsy, congenital hydrocephalus, abdominal dropsy, progress supranuclear palsy, glaucoma, Wilson disease, Alzheimer's disease and other dementias, Parkinson’s disease (PD) and PD-related disorders, multi infarct dementia, Frontotemporal dementia, pseudo-dementia, Prion disease, Motor neuron diseases, Huntington's disease, spinocerebellar ataxia, and spinal muscular atrophy.

15. The use according to any of claims 11 – 14, wherein said use is in combination with another pharmaceutically active drug or therapy, in particular radiation

therapy, chemotherapy agents, targeted drugs and immune check point inhibitor drugs.

16. The compound according to any of claims 1-7 or the pharmaceutical composition according to any of claims 9 – 10 for use as a medicament.