

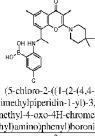
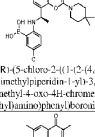
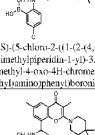


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- (81) **Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA,

(54) **Title:** CHEMICAL COMPOUNDS

FIGURE 1

Name	ADP-Glo DR IC ₅₀ (nM)		hGcll (ITRF) IC ₅₀ (nM)		
	PI3K H1047R	PI3K wt	pAKT1_S473T	pAKT1_S473	pAKT1_S473 SKBR3
 (S)-5-chloro-2-((1-(2-(4,4-dimethylpiperidin-1-yl)-3,6-dimethyl-4-oxo-4H-chromen-8-yl)ethoxy)phenyl)boronic acid	NA	NA	NA	NA	NA
 (R)-5-chloro-2-((1-(2-(4,4-dimethylpiperidin-1-yl)-3,6-dimethyl-4-oxo-4H-chromen-8-yl)ethoxy)phenyl)boronic acid	+++	+	+++	++	++
 (S)-5-chloro-2-((1-(2-(4,4-dimethylpiperidin-1-yl)-3,6-dimethyl-4-oxo-4H-chromen-8-yl)ethoxy)phenyl)boronic acid	NA	NA	+	++	+
 (R)-5-chloro-2-((1-(2-(4,4-dimethylpiperidin-1-yl)-3,6-dimethyl-4-oxo-4H-chromen-8-yl)ethoxy)phenyl)boronic acid	++	+	++	++	++

(57) **Abstract:** The present disclosure provides novel boron derivatives or their salts, compositions containing them, and their medical uses. The compounds are active as PI3K inhibitors, including PI3K mutants, and are useful in the treatment or control of diseases or disorders mediated by PI3K and its mutants.

NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO,
RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH,
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ZA, ZM, ZW.

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