

[6] The compound or the salt thereof according to any of [1] to [5], wherein R₁ represents a pyridinyl group having a halogen atom or a C1-C6 alkoxy group, a pyrazolyl group having a C1-C6 alkyl group and a C1-C6 haloalkyl group, an oxadiazolyl group having a C1-C6 haloalkyl group, or an unsubstituted furanyl group or thiazolyl group,

5 R₂, R₅ and R₆ each represent a hydrogen atom,

R₃ represents a hydrogen atom, and R₄ represents a C1-C6 alkyl group; or R₃ and R₄, together with a nitrogen atom to which they are bound, form a 4- to 6-membered monocyclic saturated heterocycle having a nitrogen atom,

10 R₇ represents a C1-C6 alkyl group, R₈ represents a hydrogen atom or a C1-C6 alkyl group, and

X₁ and X₂, which may be different from each other, each represent N or CH; and a broken line (-----) indicates a single bond and X₃ represents CH.

[7] The compound or the salt thereof according to [6], wherein R₁ represents a pyrazolyl group having a C1-C6 alkyl group and a C1-C6 haloalkyl group, or an oxadiazolyl group
15 having a C1-C6 haloalkyl group.

[8] The compound or the salt thereof according to any of [1] to [7], wherein the compound is selected from the compounds indicated below:

20 4-(4-(6-(5-(difluoromethyl)-1,3,4-oxadiazol-2-yl)-3-((2-(pyrrolidin-1-yl)ethyl)amino)pyridin-2-yl)piperidin-1-yl)-5,5-dimethyl-5H-pyrrolo[2,3-d]pyrimidin-6(7H)-one;

4-(4-(3-((2-(tert-butylamino)ethyl)amino)-6-(5-(trifluoromethyl)-1,3,4-oxadiazol-2-yl)pyridin-2-yl)piperidin-1-yl)-5,5-dimethyl-5H-pyrrolo[2,3-d]pyrimidin-6(7H)-one; and

4-(4-(3-((2-(tert-butylamino)ethyl)amino)-6-(5-(difluoromethyl)-1,2,4-oxadiazol-3-yl)pyridin-2-yl)piperidin-1-yl)-5,5-dimethyl-5H-pyrrolo[2,3-d]pyrimidin-6(7H)-one.

25 [8-1] An anti-tumor agent comprising, as an active ingredient, the compound or the salt thereof according to any one of [1] to [8].

[8-2] Use of the compound or the salt thereof according to any one of [1] to [8] in the manufacture of a medicament for the treatment of a tumor.

[8-3] A pharmaceutical composition for the treatment of a tumor comprising, as an active
30 ingredient, the compound or the salt thereof according to any one of [1] to [8].

The present disclosure also encompasses the following.

[9] An Akt inhibitor comprising, as an active ingredient, the compound or the salt thereof according to any of [1] to [8].

[10] An Rsk inhibitor comprising, as an active ingredient, the compound or the salt thereof according to any of [1] to [8].

[11] An S6K inhibitor comprising, as an active ingredient, the compound or the salt thereof according to any of [1] to [8].

[12] An inhibitor against at least two kinases selected from the group consisting of Akt, Rsk, and S6K comprising, as an active ingredient, the compound or the salt thereof according to any of [1] to [8].

[13] An inhibitor against Akt, Rsk, and S6K comprising, as an active ingredient, the compound or the salt thereof according to any of [1] to [8].

[14] A pharmaceutical composition for the treatment of a disease associated with Akt comprising, as an active ingredient, the compound or the salt thereof according to any of [1] to [8].

[15] A pharmaceutical composition for the treatment of a disease associated with Rsk comprising, as an active ingredient, the compound or the salt thereof according to any of [1] to [8].

[16] A pharmaceutical composition for the treatment of a disease associated with S6K comprising, as an active ingredient, the compound or the salt thereof according to any of [1] to [8].

[17] A pharmaceutical composition for the treatment of a disease associated with at least two kinases selected from the group consisting of Akt, Rsk, and S6K comprising, as an active ingredient, the compound or the salt thereof according to any of [1] to [8].

[18] A pharmaceutical composition for the treatment of a disease associated with Akt, Rsk, and S6K comprising, as an active ingredient, the compound or the salt thereof according to any of [1] to [8].

[19] An anti-tumor agent comprising, as an active ingredient, the compound or the salt thereof according to any of [1] to [8].

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The present disclosure further encompasses the following.

[20-1] The compound or the salt thereof according to any of [1] to [8] for use in the inhibition of Akt.

[20-2] The compound or the salt thereof according to any of [1] to [8] for use in the inhibition of Rsk.

[20-3] The compound or the salt thereof according to any of [1] to [8] for use in the inhibition of S6K.

4-(4-(3-((2-(tert-butylamino)ethyl)amino)-6-(5-(trifluoromethyl)-1,3,4-oxadiazol-2-yl)pyridin-2-yl)piperidin-1-yl)-5,5-dimethyl-5H-pyrrolo[2,3-d]pyrimidin-6(7H)-one; and

4-(4-(3-((2-(tert-butylamino)ethyl)amino)-6-(5-(difluoromethyl)-1,2,4-oxadiazol-3-yl)pyridin-2-yl)piperidin-1-yl)-5,5-dimethyl-5H-pyrrolo[2,3-d]pyrimidin-6(7H)-one.

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[Claim 9] An anti-tumor agent comprising, as an active ingredient, the compound or the salt thereof according to any one of claims 1 to 8.

[Claim 10] Use of the compound or the salt thereof according to any one of claims 1 to 8 in the manufacture of a medicament for the treatment of a tumor.

[Claim 11] A pharmaceutical composition for the treatment of a tumor comprising, as an active ingredient, the compound or the salt thereof according to any one of claims 1 to 8.