

Mouse anti Human Aurora Kinase 2

Clone JLM28

Cat. no. MONX11066

Specificity

Aurora Kinase 1 and 2 encode cell cycle-regulated serine/threonine kinases that are involved in microtubule spindle activities during mitosis and meiosis. Aurora Kinase 2, also known as STK15, BTAK, ARK1 and AIK, localises to interphase and mitotic centrosomes and to the spindle poles. It is degraded rapidly after G2/M phase release in mammalian cells. Aurora Kinase 2 is expressed at high levels in testis and various proliferating cells, including HeLa cells. Aurora Kinase 2 is regulated by phosphorylation which is important both for its activity and stability. The inhibition of its activity leads to the formation of a monopolar spindle because its activity is necessary for centrosome separation. Aurora Kinase 2 overexpression leads to centrosome amplification, chromosome instability and transformation in mammalian cells. Overexpression of both active and inactive Aurora Kinase 2 can lead to polyploidy. This suggests that Aurora Kinase 2 can behave as a dominant negative mutant and inhibit other aurora kinases. When inactive kinase is expressed, however, the cells eventually die and do not become immortalised, unlike with the active kinase.

Immunogen

131 amino acid region of the N-terminus of human Aurora Kinase 2 molecule.

Immunoglobulin type

Mouse IgG_{2a}

Use

The antibody can be used for immunohistochemistry on paraffin sections.

Instructions for use:

Suggested dilution: 1:50 for 60 minutes at 25°C. This is provided as a guide and users should determine their own optimal working dilutions.

Presentation

1.0 ml liquid tissue culture supernatant containing 15 mM sodium azide as a preservative.

Literature

- Honda K, Mihara H, Kato Y, et al.. *Oncogene*. 19: 2812-2819 (2000).
- Walter A O, Seghezzi W, Korver W, et al.. *Oncogene* 19 (42): 4906-4916 (2000).
- Tanaka T, Kumura M, Matsunaga K, et al.. *Cancer Research*. 59 (9): 2041-2044 (1999).
- Bischoff J R, Anderson L, Zhu Y, et al.. *EMBO Journal*. 17 (11): 3052-3065 (1998).

Storage and Handling

Store at 2-8°C. until expiry date. For long term storage, it is recommended that aliquots of the reconstituted antibody are stored frozen at -20°C

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