

# PRODUCT INFORMATION



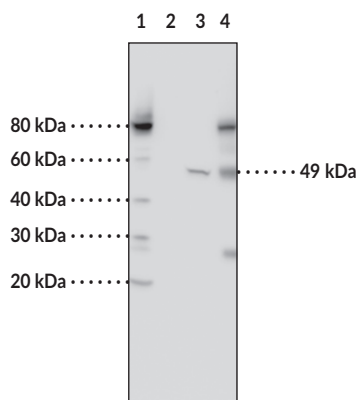
## IP6K2 Monoclonal Antibody (Clone 4F10)

Item No. 10239

### Overview and Properties

<b>Contents:</b>	This vial contains 200 µg lyophilized protein A-purified monoclonal antibody.
<b>Synonyms:</b>	IHPK2, Inositol Hexakisphosphate Kinase 2
<b>Immunogen:</b>	Human IP6K2 protein
<b>Species Reactivity:</b>	(+) Human; other species not tested
<b>Uniprot No.:</b>	Q9UHH9
<b>Form:</b>	Solid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥1 year
<b>Storage Buffer:</b>	TBS, pH 7.4 when resuspended in 500 µl of double-distilled water
<b>Clone:</b>	4F10
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG2b
<b>Applications:</b>	Immunocytochemistry (ICC) and Western blot (WB); the recommended starting dilution for ICC is 1:50-1:100 and 1:200 for WB. Other applications were not attempted and therefore optimal working dilutions should be determined empirically.

### Image



**Lane 1:** MW Standard  
**Lane 2:** IP6K2 control lysate (10 µg)  
**Lane 3:** IP6K2 over expressed lysate (10 µg)  
**Lane 4:** Mouse small intestine supernatant (30 µg)

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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## Description

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Inositol hexakisphosphate kinase 2 (IP6K2) is a cytoplasmic kinase that catalyzes the conversion of IP<sub>6</sub> to diphosphoinositol pentakisphosphate in the presence of ATP.<sup>1</sup> IP6K2 functions as a proapoptotic protein kinase.<sup>2</sup> IP6K2 binds to tumor necrosis factor receptor-associated factor 2 and inhibits NF-κB signaling.<sup>3</sup> Heat Shock Protein 90 regulates apoptosis through a normal physiological interaction with IP6K2 by inhibiting its catalytic activity.<sup>4</sup> Thus, IP6K2 is a potential target for cancer therapeutics development.<sup>4</sup>

## References

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1. Saiardi, A., Erdjument-Bromage, H., Snowman, A.M., *et al.* Synthesis of diphosphoinositol pentakisphosphate by a newly identified family of higher inositol polyphosphate kinases. *Curr. Biol.* **9**, 1323-1326 (1999).
2. Morrison, B.H., Bauer, J.A., Kalvakolanu, D.V., *et al.* Inositol hexakisphosphate kinase 2 mediates growth suppressive and apoptotic effects of interferon- $\beta$  in ovarian carcinoma cells. *J. Biol. Chem.* **276**(27), 24965-24970 (2001).
3. Morrison, B.H., Bauer, J.A., Lupica, J.A., *et al.* Effect of inositol hexakisphosphate kinase 2 on transforming growth factor  $\beta$ -activated kinase 1 and NF- $\kappa$ B activation. *J. Biol. Chem.* **282**(21), 15349-15356 (2007).
4. Chakraborty, A., Koldobskiy, M.A., Sixt, K.M., *et al.* HSP90 regulates cell survival via inositol hexakisphosphate kinase-2. *Proc. Natl. Acad. Sci. USA* **105**(4), 1134-1139 (2008).

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