

**AM20217PU-N****Monoclonal Antibody to PAK4 (incl. pos. control) - Purified**

<b>Alternate names:</b>	KIAA1142, PAK 4, PAK-4, Serine/threonine-protein kinase PAK 4, p21-activated kinase 4
<b>Quantity:</b>	0.1 mg
<b>Background:</b>	p21 activated kinases (PAK) are regulated by the small GTP - binding proteins Rac and cdc42, which stimulate autophosphorylation and phosphorylation of downstream signaling proteins. PAK4 is activated upon autophosphorylation of Ser 474 in the kinase activation loop. PAK4 is frequently overexpressed in human tumor cell lines and might play an important role in oncogenesis.
<b>Uniprot ID:</b>	<a href="#">O96013</a>
<b>NCBI:</b>	<a href="#">NP_001014831</a>
<b>GenID:</b>	<a href="#">10298</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM10P (for use in human samples), SM20P (for use in rat samples), AM03095PU-N
<b>Clone:</b>	6C1
<b>Immunogen:</b>	Peptide conjugated to hemocyanin <b>Epitope:</b> Peptide derived from the kinase activation loop.
<b>Format:</b>	<b>State:</b> Lyophilized purified Ig fraction. <b>Purification:</b> Subsequent Ultrafiltration and Size Exclusion Chromatography. <b>Buffer System:</b> 1ml PBS, containing 0.09% Sodium Azide/PEG and Sucrose. <b>Reconstitution:</b> Restore with 1 ml H <sub>2</sub> O (15 min, RT).
<b>Applications:</b>	<b>Immunoblotting:</b> 0.5 µg/ml for HRPO/ECL detection. <i>Recommended blocking buffer:</i> Casein/Tween 20 based blocking and blot incubation buffer AS00002BU-N or AS00002BU-L. <i>Included Positive Control:</i> Cell lysate from untreated SW480 cells (See Protocols for more details). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	Recognizes p21 activated kinase 4 (PAK4). <b>Species:</b> Human, Mouse, Rat and Canine (Dog). Other species not tested.
<b>Add. Information:</b>	<b>Mol. weight:</b> 60 kDa
<b>Storage:</b>	For long-term storage, freeze lyophilizate upon arrival (-20°C). Upon reconstitution, aliquote and freeze in liquid nitrogen; reconstituted antibody can be stored frozen at -80°C up to 1 year. Avoid repeated freeze / thaw cycles. Thaw aliquots at 37°C. Thawed aliquots may be stored at 2-8°C up to 3 months.

**Protocols:**

**Positive Control Provided.**  
Cell lysate from untreated SW480 cells

**Description:** Cell lysate from untreated SW480 cells, colorectal adenocarcinoma (Human)

**Format:** Lyophilized cell lysate from serum starved SW480 cells.

**Reconstitution:** Restore by addition of 200  $\mu$ l H<sub>2</sub>O. After complete solubilization add 200  $\mu$ l 2x SDS-PAGE sample buffer, mix and incubate at 90°C for 5 min.

**Storage:** Aliquote and store frozen.  
Avoid repeated freeze/thaw cycles.

**Application:** The positive control cell lysate is recommended for immunoblot applications. 20  $\mu$ l of positive control cell lysate correspond to ca. 80.000 cells. Use 20  $\mu$ l / lane (mini gel) for HRPO/ECL detection of the target proteins.

**Please note:** The lyophilized cell lysates contain SDS and are not recommended for applications with native proteins such as immunoprecipitation.

**Pictures:**

**Detection of endogenous PAK4:** Whole cell lysates of serum starved tumor cells (20.000 cells per lane) were applied to SDS-PAGE and transferred to PVDF membranes. Immunoblots were probed with AM20217PU-N PAK4 antibody (Clone 6C1) at 0.5  $\mu$ g/ ml for 1h at RT and developed by ECL (exp. time: 30 sec).  
Lane 1: A431 Lane 2: SW480 Lane 3: SW620 Lane 4: HT29 Lane 5: MCF7 Lane 6: MDA-MB-231 Lane 7: T47D

