

## Product datasheet for **CF807297**

### PAK4 Mouse Monoclonal Antibody [Clone ID: OTI1C7]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI1C7
Applications:	IHC, WB
Recommended Dilution:	WB 1:2000, IHC 1:150
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment corresponding to amino acids 1-308 of human PAK4(NP_005875) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	63.9 kDa
Gene Name:	p21 (RAC1) activated kinase 4
Database Link:	<a href="#">NP_005875</a> <a href="#">Entrez Gene 70584 Mouse</a> <a href="#">Entrez Gene 292756 Rat</a> <a href="#">Entrez Gene 10298 Human</a> <a href="#">O96013</a>



[View online »](#)

**Background:**

PAK proteins, a family of serine/threonine p21-activating kinases, include PAK1, PAK2, PAK3 and PAK4. PAK proteins are critical effectors that link Rho GTPases to cytoskeleton reorganization and nuclear signaling. They serve as targets for the small GTP binding proteins Cdc42 and Rac and have been implicated in a wide range of biological activities. PAK4 interacts specifically with the GTP-bound form of Cdc42Hs and weakly activates the JNK family of MAP kinases. PAK4 is a mediator of filopodia formation and may play a role in the reorganization of the actin cytoskeleton. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

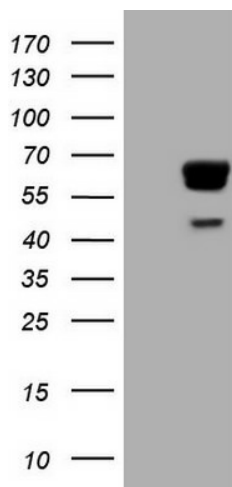
**Protein Families:**

Druggable Genome, Protein Kinase

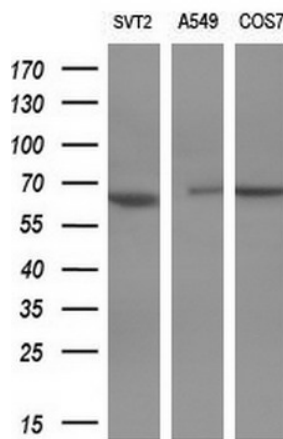
**Protein Pathways:**

Axon guidance, ErbB signaling pathway, Focal adhesion, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway

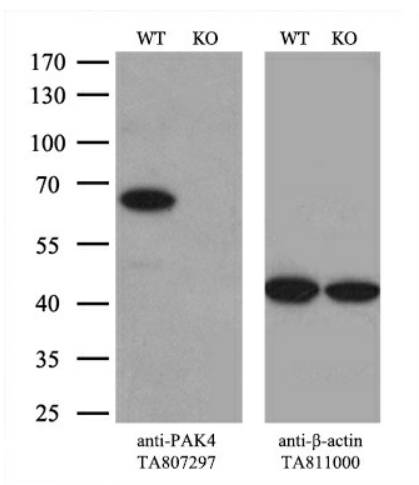
**Product images:**



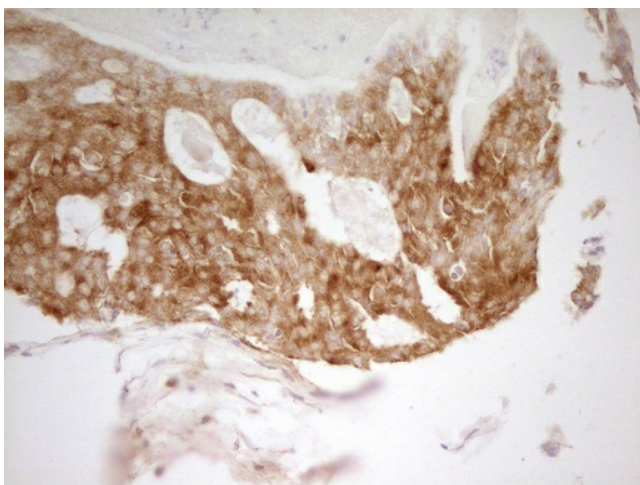
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PAK4 (Cat# [RC202302], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PAK4 (Cat# [TA807297]). Positive lysates [LY417002] (100ug) and [LC417002] (20ug) can be purchased separately from OriGene.



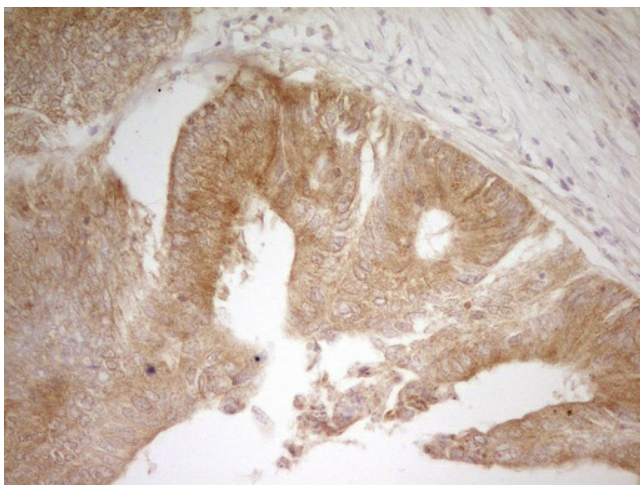
Western blot analysis of extracts (10ug) from 3 different cell lines by using anti-PAK4 monoclonal antibody (1:1000).



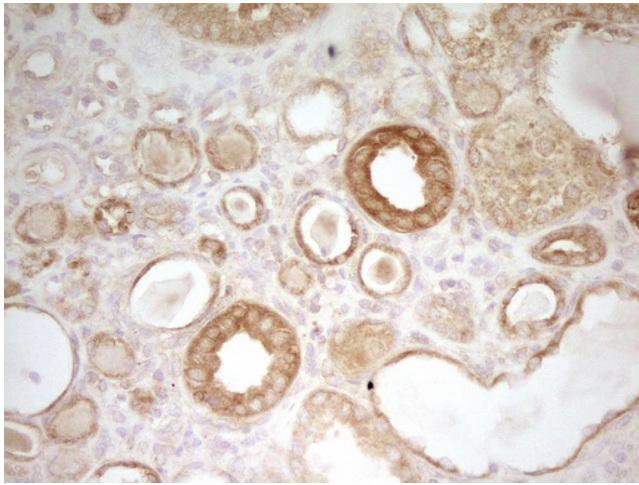
Equivalent amounts of cell lysates (10 ug per lane) of wild-type 293T cells (WT, Cat# LC810293T) and PAK4-Knockout 293T cells (KO, Cat# [LC810783]) were separated by SDS-PAGE and immunoblotted with anti-PAK4 monoclonal antibody [TA807297], (1:500). Then the blotted membrane was stripped and reprobed with anti-β-actin antibody ([TA811000]) as a loading control.



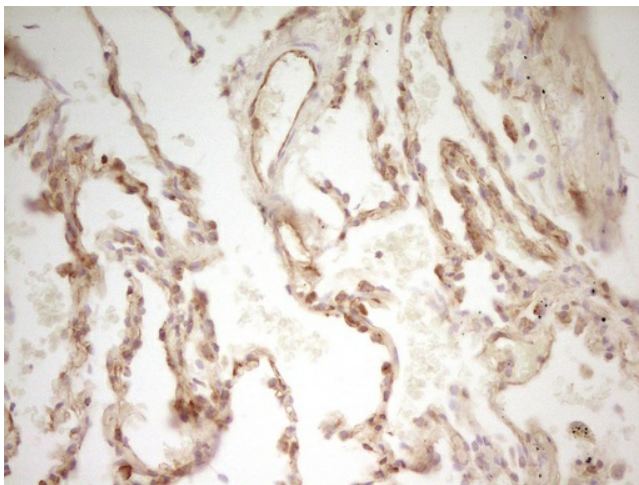
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human breast tissue using anti-PAK4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA807297])



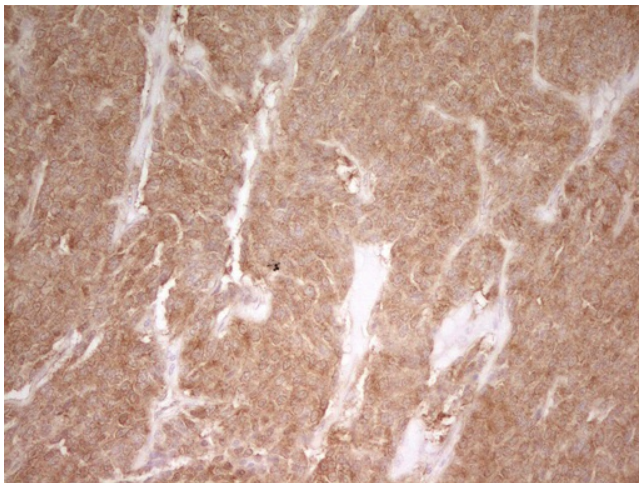
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human colon tissue using anti-PAK4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA807297])



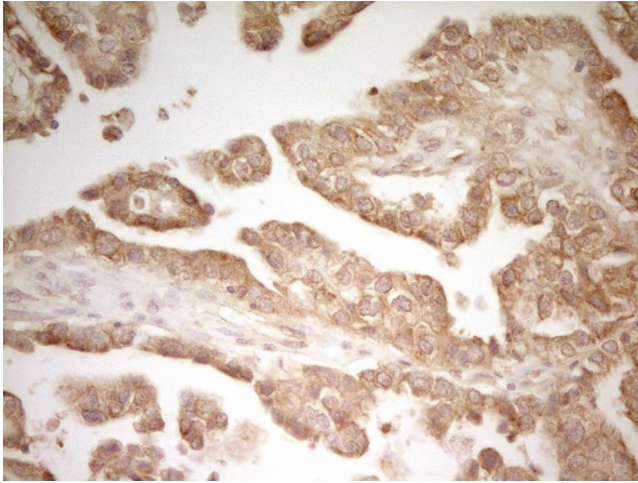
Immunohistochemical staining of paraffin-embedded Human Kidney tissue within the normal limits using anti-PAK4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA807297])



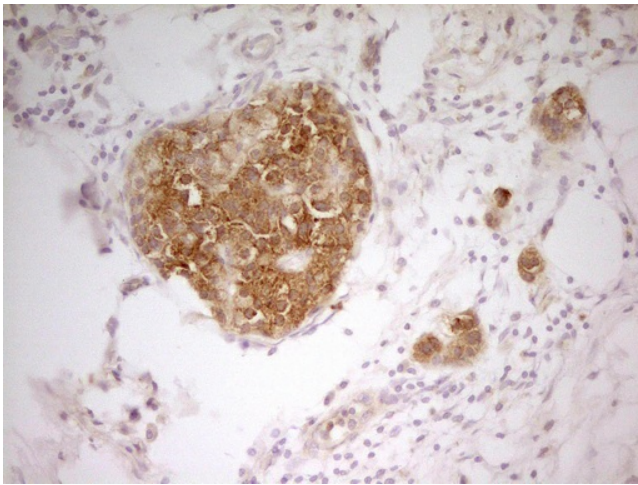
Immunohistochemical staining of paraffin-embedded Human lung tissue within the normal limits using anti-PAK4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA807297])



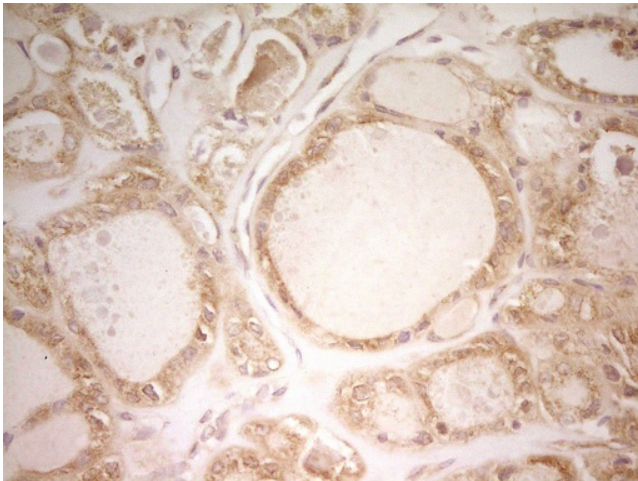
Immunohistochemical staining of paraffin-embedded Carcinoma of Human lung tissue using anti-PAK4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA807297])



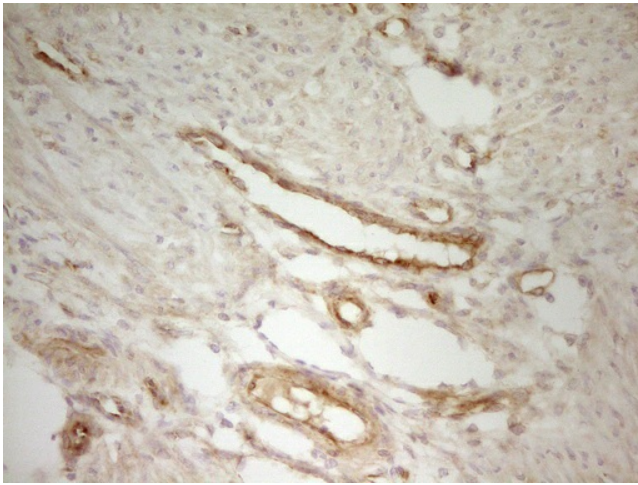
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human ovary tissue using anti-PAK4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA807297])



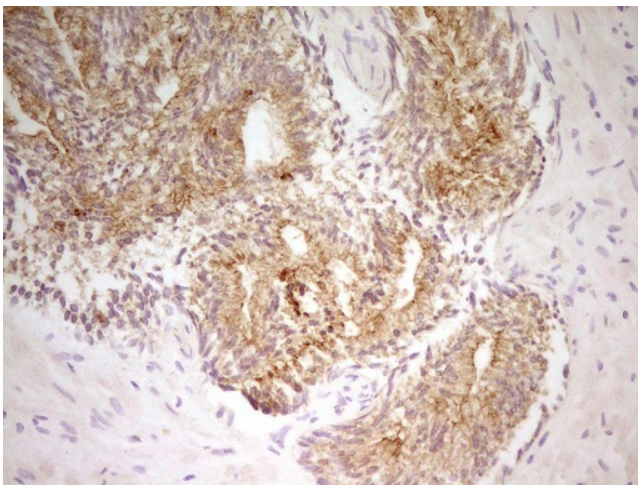
Immunohistochemical staining of paraffin-embedded Carcinoma of Human pancreas tissue using anti-PAK4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA807297])



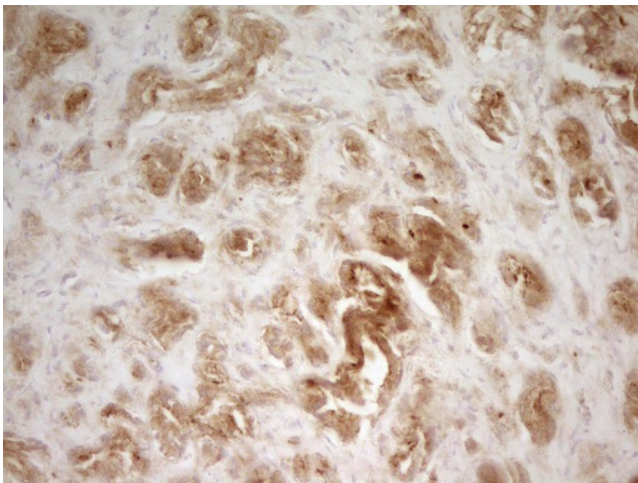
Immunohistochemical staining of paraffin-embedded Carcinoma of Human thyroid tissue using anti-PAK4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA807297])



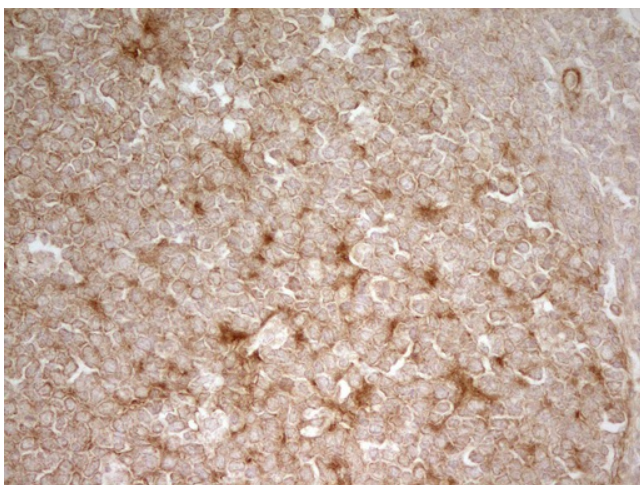
Immunohistochemical staining of paraffin-embedded Human endometrium tissue within the normal limits using anti-PAK4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA807297])



Immunohistochemical staining of paraffin-embedded Human prostate tissue within the normal limits using anti-PAK4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA807297])



Immunohistochemical staining of paraffin-embedded Carcinoma of Human prostate tissue using anti-PAK4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA807297])



Immunohistochemical staining of paraffin-embedded Human tonsil within the normal limits using anti-PAK4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA807297])