

## Product datasheet for **TA373423**

### AKT2 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC, WB
Recommended Dilution:	WB,1:500 - 1:2000 IHC,1:50 - 1:200 IF,1:50 - 1:200
Reactivity:	Human, Mouse, Rat
Modifications:	Unmodified
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human Akt2
Formulation:	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	51kDa/55kDa
Gene Name:	AKT serine/threonine kinase 2
Database Link:	<a href="#">Entrez Gene 208 Human P31751</a>



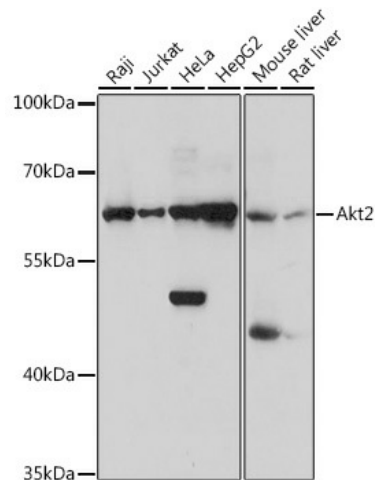
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**Background:**

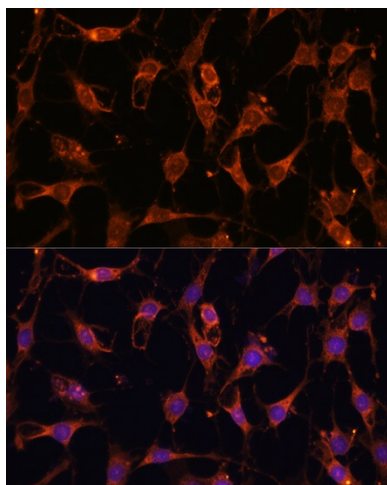
This gene encodes a protein that is instrumental in patterning the early embryo. It has been implicated as the key inductive signal in patterning of the ventral neural tube, the anterior-posterior limb axis, and the ventral somites. Of three human proteins showing sequence and functional similarity to the sonic hedgehog protein of *Drosophila*, this protein is the most similar. The protein is made as a precursor that is autocatalytically cleaved; the N-terminal portion is soluble and contains the signalling activity while the C-terminal portion is involved in precursor processing. More importantly, the C-terminal product covalently attaches a cholesterol moiety to the N-terminal product, restricting the N-terminal product to the cell surface and preventing it from freely diffusing throughout the developing embryo. Defects in this protein or in its signalling pathway are a cause of holoprosencephaly (HPE). It is also thought that mutations in this gene or in its signalling pathway may be responsible for VACTERL syndrome. Additionally, mutations in a long range enhancer located approximately 1 megabase upstream of this gene disrupt limb patterning and can result in preaxial polydactyly.

**Synonyms:**

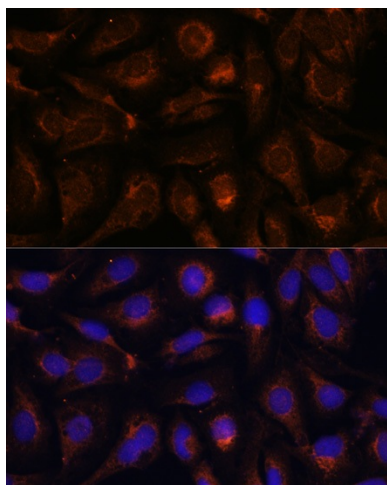
PKBB; PKBBETA; PRKBB; RAC-BETA; RAC-PK-beta

**Product images:**

Western blot analysis of extracts of various cell lines, using Akt2 antibody (TA373423) at 1:1000 dilution. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25ug per lane. | Blocking buffer: 3% nonfat dry milk in TBST. | Detection: ECL Basic Kit . | Exposure time: 30s.



Immunofluorescence analysis of C6 cells using AKT2 antibody (TA373423) at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U2OS cells using AKT2 antibody (TA373423) at dilution of 1:100. Blue: DAPI for nuclear staining.