

# Akt2-KO

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|---------------------|---|
| <b>Nomenclature</b> | C57BL/6Smoc- <i>Akt2</i> <sup>em15moc</sup> |
| <b>Cat. NO.</b>     | NM-KO-190742                                |
| <b>Strain State</b> | Embryo cryopreservation                     |

## Gene Summary

|                            |                       |                                       |
|----------------------------|-----------------------|---------------------------------------|
| <b>Gene Symbol</b><br>Akt2 | <b>Synonyms</b>       | PKB, PKBbeta, AW554154, 2410016A19Rik |
|                            | <b>NCBI ID</b>        | <a href="#">11652</a>                 |
|                            | <b>MGI ID</b>         | <a href="#">104874</a>                |
|                            | <b>Ensembl ID</b>     | <a href="#">ENSMUSG00000004056</a>    |
|                            | <b>Human Ortholog</b> | AKT2                                  |

## Model Description

Exon 3-4 of Akt2 gene was deleted to generate Akt2 knockout mice.

**Research Application:** Signal Transduction related

\*Literature published using this strain should indicate: Akt2-KO mice (Cat. NO. NM-KO-190742) were purchased from Shanghai Model Organisms Center, Inc..

## Disease Connection

|                                 |                     |  |
|---------------------------------|---------------------|--|
| <b>Type 2 Diabetes Mellitus</b> | <b>Phenotype(s)</b> | <a href="#">MGI:3629188</a>  |
|                                 | <b>Reference(s)</b> | Cho H, Mu J, Kim JK, Thorvaldsen JL, Chu Q, Crenshaw EB 3rd, Kaestner KH, Bartolomei MS, Shulman GI, Birnbaum MJ, Insulin resistance and a diabetes mellitus-like syndrome in mice lacking the protein kinase Akt2 (PKB beta). Science. 2001 Jun 1;292(5522):1728-31 |

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|----------------------------------|---------------------|---|
| <b>Polycystic Ovary Syndrome</b> | <b>Phenotype(s)</b> | <a href="#">MGI:5429853</a>   |
|                                  | <b>Reference(s)</b> | Restuccia DF, Hynx D, Hemmings BA, Loss of PKBbeta/Akt2 predisposes mice to ovarian cyst formation and increases the severity of polycystic ovary formation in vivo. Dis Model Mech. 2012 May;5(3):403-11 |

### Validation Data

No data

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