

## Basic Information

<b>Product Name</b>	Anti-Zebrafish AKT3 Antibody
<b>Gene Name</b>	AKT3
<b>Source</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Species Reactivity</b>	zebrafish
<b>Tested Application</b>	WB
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.
<b>Immunogen</b>	E.coli-derived zebrafish AKT3 recombinant protein (Position: M104-L154).
<b>Concentration</b>	500 ug/ml
<b>Purification</b>	Immunogen affinity purified.
<b>Observed MW</b>	56 kDa
<b>Dilution Ratios</b>	Western blot (WB):1:500-2000

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

RAC-gamma serine/threonine-protein kinase, also known as protein kinase Akt-3, is an enzyme that in humans is encoded by the AKT3 gene. This gene is mapped to 1q43-q44. The protein encoded by this gene is a member of the AKT, also called PKB, serine/threonine protein kinase family. AKT kinases are known to be regulators of cell signaling in response to insulin and growth factors. They are involved in a wide variety of biological processes including cell proliferation, differentiation, apoptosis, tumorigenesis, as well as glycogen synthesis and glucose uptake. This kinase has been shown to be stimulated by platelet-derived growth factor(PDGF), insulin, and insulin-like growth factor 1(IGF1). AKT3 plays an important role in brain development and is crucial for the viability of malignant glioma cells. AKT3 isoform may also be the key molecule in up-regulation and down-regulation of MMP13 via IL13. This gene is required for the coordination of mitochondrial biogenesis with growth factor-induced increases in cellular energy demands.

## Selected Validation Data

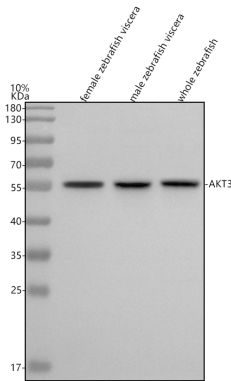


Figure 1. Western blot analysis of AKT3 using anti-AKT3 antibody (AZD9IL79). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: female zebrafish viscera tissue lysates,

Lane 2: male zebrafish viscera tissue lysates,

Lane 3: whole zebrafish tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-AKT3 antigen affinity purified polyclonal antibody (AZD9IL79) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for AKT3 at approximately 56 kDa. The expected band size for AKT3 is at 56 kDa.