SANTA CRUZ BIOTECHNOLOGY, INC.

Mos^{xe} (C237): sc-86

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The cellular homolog of the v-Mos oncogene, originally derived from the Moloney strain murine sarcoma virus, has now been isolated from several species including human, mouse, chicken and *Xenopus*. In each of these species, the c-Mos proto-oncogene locus consists of a single exon which encodes Mos, a serine/threonine protein kinase involved in the regulation of the meiotic cell cycle in vertebrate oocytes. Mos function during oocyte maturation is thought to be exerted through the stabilization or activation of the maturation promoting factor (MPF) complex. While the level of Mos expression is generally low in somatic cells, Mos is expressed at relatively high levels in germ cells. Mos can efficiently cause oncogenic transformation of somatic cells when ectopically expressed during the G_1 phase of the cell cycle. Mos activates MAPK, possibly through direct phosphorylation of the MAPKK MEK-1.

REFERENCES

1. Klein, G., et al. 1981. The role of gene dosage and genetic transpositions in carcinogenesis. Nature 294: 313-318.
2. Watson, R., et al. 1982. Human DNA sequence homologous to the transforming gen (Mos) of Moloney murine sarcoma virus. Proc. Natl. Acad. Sci. USA 79: 4078-4082.
3. Propst, F., et al. 1985. Expression of c-Mos proto-oncogene transcripts in mouse tissues. Nature 315: 516-518.

SOURCE

Mos^{xe} (C237) is available as either rabbit (sc-86) or goat (sc-86-G) polyclonal affinity purified antibody raised against a peptide mapping at the C-terminus of Mos^{xe} of *Xenopus laevis* origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Mos^{xe} (C237) is recommended for detection of Mos p39 of *Xenopus laevis* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Molecular Weight of Mos^{xe}: 37 kDa.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

SELECT PRODUCT CITATIONS

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14. Gaffre, M., et al. 2011. A critical balance between cyclin B synthesis and Myt1 activity controls meiosis entry in *Xenopus* oocytes. Development 138: 3735-3744.
15. Dupré, A., et al. 2014. Phosphorylation of ARPP19 by protein kinase A prevents meiosis resumption in *Xenopus* oocytes. Nat. Commun. 5: 1-11.