1-LBS-15 LBS**Early postnatal lethality of mice lacking mitochondrial protein p13**

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p13 is mitochondrial protein *widely expressed in central* and peripheral tissues. Recently, we generated mice lacking p13 (p13^{-/-} mice), and found that p13^{-/-} genotype was smaller than the expected Mendelian ratio at 3 weeks of age (approx. 40% of the expected ratio). Here, we investigated the possible mechanisms underlying the loss of p13^{-/-} mice. At postnatal day 0 (P0), Mendelian segregation of pup genotypes from heterozygous breeding was observed ($n = 294$, $P = 0.25$, χ^2 analysis), suggesting a significant loss of p13^{-/-} pups specifically during the postnatal period. Kaplan-Meier survival analysis demonstrated that more than half of p13^{-/-} mice died during the first 2 postnatal days. At P0, we observed the presence of milk in p13^{-/-} pups stomach, however, their blood glucose levels were significantly lower than that of wild-type littermates. Taken together, the present results suggest that p13 contributes to early postnatal survival and maintenance of the normal blood glucose levels.