



**Supplementary Figure S1.** Representative image showing the hematoxylin–eosin (HE) stained ovaries from mice treated with either PBS (Control, upper panel), hypo-glycosylated FSH (FSH18/21, left lower panel) or fully glycosylated FSH (FSH24, right lower panel) for 48 h. To stimulate follicle development, PND 17 female CD-1 mice were treated with PBS (150  $\mu$ l), hFSH18/21 (1  $\mu$ g/150  $\mu$ l PBS) or hFSH24 (1  $\mu$ g/150  $\mu$ l PBS) by intraperitoneal injection (i.p.) twice daily (8:00 a.m. and 6:00 p.m.) for 2 days. All mice were euthanized 48 h after the first injection and ovaries were isolated. One ovary from each mouse was immediately frozen in liquid nitrogen for subsequent extraction of protein or RNA. The other ovary was immediately fixed in modified Davidson's fixative (Newcomer Supply, Middleton, WI, USA) for 4–6 h and processed for paraffin embedding. The samples were dehydrated, embedded in paraffin and 5  $\mu$ m serial sections were cut. Sections were placed in order onto positively charged glass slides followed by hematoxylin and eosin staining (HE). Secondary, small antral and large antral follicles were counted in every 5th serial section. More large antral follicles were found in FSH18/21 treatment group (Fig. 1). Red arrow indicates preantral follicles; green arrows indicate small antral follicles; blue arrows indicate large antral follicles. Scale bar: 50  $\mu$ m.