

Primordial germ cells are precursors of sexual breeding organisms. For induction of their formation are necessary growth factors from extraembryonic ectoderm. There are key proteins BMP4 and BMP8b among these factors. These proteins form both homodimers and heterodimers and through receptor complexes and SMAD proteins are indicating the competent cells of proximal epiblast, which give rise to the primordial germ cells and other structures of embryonic mesoderm. Although BMP4 and BMP8b proteins signal similarly, they are mutually indispensable and though for induction of primordial germ cells are both necessary. Up to now, it was proposed several models of their interaction, but not yet completely accurate.