

The role of the ileal Peyer's patches and bone marrow in B cell development in swine

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Pigs are traditionally categorized into group of animals that use Gut Associated Lymphoid Tissues (GALT) for generation of B cell repertoire. This group include chicken that use bursa of Fabricius, rabbit that use sacculus rotundus (or appendix) and other ungulates including swine that use Ileal Peyer's Patches (IPP). Our recent studies disprove this categorization by showing that at least in swine (and probably in other ungulates), IPP are not a significant source of B cells, are not required for maintenance of the systemic B cell pool and are not a site of primary B cell lymphogenesis. According to finding that IPP are a secondary lymphoid tissue we have extended those studies by showing that porcine B cells are developed in the bone marrow, which is the primary lymphogenetic organ also for mouse and human.