**S8 Table. The housekeeping genes of pig identified in the present and previous studies.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| References | Selected genes | Most stable genes | Most unstable genes | Sample category |
| *Erkens et al. (2006)[1]* | *B-actin,B2M,GAPDH,HMBS,HPRT1,RPL13A,SDHA,TBP,TOP2B* and *YWHAZ* | *B-actin/TBP/TOP2B* | *RPL13A /SDHA* | Backfat and l*ongissimus dorsi* muscle |
| *Kuijk et al. (2007)[2]* | *B2M,B-actin,GAPDH,H2A,PGK1,18S* and *UBC* | *GAPDH/UBC* | *B2M/B-actin/H2A* | Oocytes and preimplantation embryos |
| *Nygard et al. (2007)[3]* | *B-actin,GAPDH,HMBS,HPRT1,RPL4,SDHA,TBP* and *YWHAZ* | *B-actin /RPL4/TBP* | *GAPDH* | Adipose, bladder, bone marrow, cerebellum, cortex cerebri, heart, hippocampus, kidney, liver, lung, lymph nodes, muscle, pancreas, skin, small intestine, stomach and thymus |
| *Svobodova et al.(2008)[4]* | *EEF1A1,GAPDH,HPRT1* and *TOP2B* | *EEF1A1/HPRT1* | *GAPDH* | Diaphragm |
|  |  | *GAPDH/HPRT1* | *EEF1A1* | Heart |
|  |  | *EEF1A1/TOP2B* | *GAPDH* | Kidney |
|  |  | *GAPDH/TOP2B* | *EEF1A1* | Liver |
|  |  | *HPRT1/TOP2B* | *GAPDH* | Lungs |
|  |  | *GAPDH* | *EEF1A1/HPRT1* | Muscle and spleen |
| *Tramontana et al. (2008)[5]* | *VAPB,TRIM41,SCD,RPS15A,MTG1,MRPL39,LTF,FABP3,CSN1S2, API5,AP1S1* and *ACTB* | *MRPL39/API5/VAPB* | *AP1S1* | Mammary tissue |
| *Feng et al.(2010)[6]* | *GPX1,PPIA,GAPDH,SDHA,eEF-1γ,ATP5G1,SHAS2,GPI, B-actin* and *HPRT1* | *PPIA/HPRT1/SDHA* | *SHAS2/GAPDH* | Skeletal muscle of Yorkshire sows |
|  |  | *PPIA/eEF-1γ/HPRT1* | *SHAS2/GAPDH* | Skeletal muscle in Meishan sows |
| *McBryan et al.(2010)[7]* | *B-actin,ATP5G1,B2M,GPX1,RPL4,TBP and YWHAZ* | *B2M/RPL4/TBP* | *GPX1/ B-actin* | *Longissimus thoracis et lumborum* muscle |
| *Gu et al.(2011)[8]* | *5S,18S, B-actin,ALDOA,B2M,GAPDH,HMBS,HPRT1,*  *HSPCB,Met-tRNA,PGK1,PPIA,RPL13A,RPL19,*  *SDHA,TBP,TOP2B,U6,UBC* and *YWHAZHMBS* | *HSPCB/ALDOA/GAPDH*  *TOP2B/HSPCB/YWHAZ* | *HMBS/PGK1*  *5S/ B-actin* | Adipose tissues  Muscle tissues |
| *Li et al.(2011)[9]* | *H3,B-actin,GAPDH,UBS* and *18S* | *H3/B-actin* | *UBS* | Liver, kidney and thyroid |
|  |  | *GAPDH/B-actin* | *UBS* | Abdominal Fat |
| *Martino et al.(2011)[10]* | *GAPDH, B-actin,B2M,TBP,HPRT-1,PPIA,TOP2B* and *YWHAZ* | *HPRT-1/TBP/PPIA*  *PPIA/GAPDH/ B-actin*  *HPRT-1/TBP/GAPDH* | *TOP2B*  *TOP2B*  *B2M* | Right and left atrium  Right ventricle  Left ventricle |
| *Wang et al.(2011)[11]* | *B-actin,B2M,PGK1,RPG* and *RPS20* | *RPS20/RPG* | *B-actin/B2M/PGK1* | Endometrium |
| *Cinar et al.(2012)[12]* | *B2M,BLM,GAPDH,HPRT1,PPIA,RPL4,SDHA,TBP* and *YWHAZ* | *SDHA/YWHAZ/RPL4* | *GAPDH* | Alveolar macrophages |
| *Zhang et al.(2012)[13]* | *GAPDH, ACTB, H3F3A, HPRT1, RPL32* and *RPS18* | *H3F3A/RPS18*  *PRL32/RPS18* | *GAPDH*  *GAPDH* | Skeletal muscle in Tongcheng pigs  Skeletal muscle in Landrace pigs |
| *Gessner et al.(2013)[14]* | *ATP5G1,SDHA, B-actin,GPI* and *GAPDH* | *ATP5G1*  *SDHA* | *GAPDH*  *RPS9* | Liver  Duodenum |
| *Martinez-Giner et al.(2013)[15]* | *B-actin,B2M,UBC,TBP,YWHAZ,GNB2L1,HMBS,HPRT* and *RPL32* | *TBP/UBC/SDHA*  *TBP/GNB2L1/HPRT1* | *HMBS*  *ACTB/B2M/PGK1* | Ovary  Boar spermatozoa |
| *Zeng et al.(2014)[16]* | *B-actin,B2M,GAPDH,HPRT1,RPL4,SDHA,YWHAZ,PPIA,PGK1,*  *18S* and *BLM* | *GAPDH/RPL4/PPIA* | *BLM/B2M* | Boar spermatozoa |
| *Park et al.(2015)[17]* | *B-actin,ALDOA,B2M,GAPDH,HPAR1,HSPCB,PGK1,POLR2G,*  *PPIA,RPL4,RPS18,SDHA,TBP,TOP2B* and *YWHAZ* | *PPIA/TBP/HSPCB*  *PPIA/TBP/RPL4/RPS18*  *PPIA/TBP* | *HPRT1/SDHA*  *HPRT1/SDHA*  *HPRT1/SDHA* | Liver, lung, kidney, spleen,  stomach, small intestine, and large intestine of Berkshire pigs  Liver, lung, kidney, spleen, stomach, small intestine, and large intestine of Landrace pigs  Liver, lung, kidney, spleen, stomach, small intestine, and large intestine of Duroc pigs |
|  |  | *PPIA/TOP2B/RPL4* | *HPRT1/SDHA* | Liver, lung, kidney, spleen, stomach, small intestine, and large intestine of Yorkshire pigs |
| *Wang et al.(2015)[18]* | *GPX1,PPIA,SDHA,POLR2A, B-actin,AGPAT1,RPL32,H3F3A,*  *GAPDH* and *B2M* | *DRAP1/WSB2* | *B2M/GAPDH* | Skeletal muscle |
| *Li et al.(2016)[19]* | *BANF1,DAK,DPH3,GTF2H3,NSUN5,NUBP1,PRR3,SSU72, TIMM17B,VPS4A,COL1A1,DBI,GAPDH, B-actin,TBP,PPLA, TOP2B,ALDOA,B2M,HPRT1,PGK1,POLR2G,RPL4,RPS18, SDHA,YWHAZ,RPL13A,18S,UXT,TUBA,EIF3K,CLN3* and *RPLP0* | *B-actin/ALDOA/RPS18* | *GAPDH* | *Longissimus dorsi* muscle |
| *Wang et al.(2016)[20]* | *HPRT1,HMBS,18S,B2M* and *B-actin* | *B2M/HMBS/HPRT1* | *18S/ B-actin* | Duodenum |
| *Sandercock et al. (2017)[21]* | *ACTB,SDHA,UBC,B2M,GAPDH* and *eEF-1* | *GAPDH/eEF-1/UBC*  *B-actin/SDHA/UBC* | *ACTB/SDHA*  *GAPDH/eEF-1* | Dorsal root ganglia samples  Spinal cord samples |
| Our study | *5S,RPL4,CANX,ALDOA,PPARGC1A,HSPCB,TBP,*  *B2M,HMBS,HPRT1,B-actin,18S,YWHAZ,RPL32,*  *PGK1,PPIA,TOP2B* and *GAPDH* | *B2M/HMBS/HPRT1* | *GAPDH/18S* | Duodenum, jejunum, ileum and colon |

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