Supplementary information

Comprehensive Analysis of Expression, Clinicopathological Association and Potential Prognostic Significance of RABs in Pancreatic Cancer

Shashi Anand [1,2], Mohammad Aslam Khan [1,2], Moh'd Khushman [3], Santanu Dasgupta [1,2], Seema Singh [1,2,4] and Ajay Pratap Singh [1,2,4],*

[1] Department of Pathology, College of Medicine, University of South Alabama, Mobile, AL 36617, USA; sanand@health.southalabama.edu (S.A.); makhan@health.southalabama.edu (M.A.K.); dasgupta@southalabama.edu (S.D.); seemasingh@health.southalabama.edu (S.S.)

[2] Cancer Biology Program, Mitchell Cancer Institute, University of South Alabama, Mobile, AL 36604, USA

[3] Department of Medical Oncology, Mitchell Cancer Institute, University of South Alabama, Mobile, AL 36604, USA; mmkhushman@health.southalabama.edu

[4] Department of Biochemistry and Molecular Biology, College of Medicine, University of South Alabama, Mobile, AL 36688, USA

* Correspondence: asingh@health.southalabama.edu; Tel.: +1-251-445-9843; Fax: +1-251-460-6994

Tumor stage-specific expression
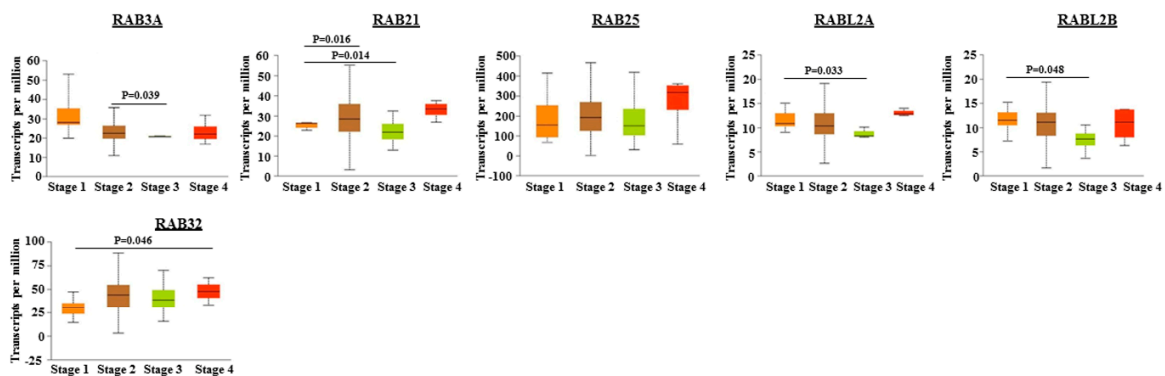
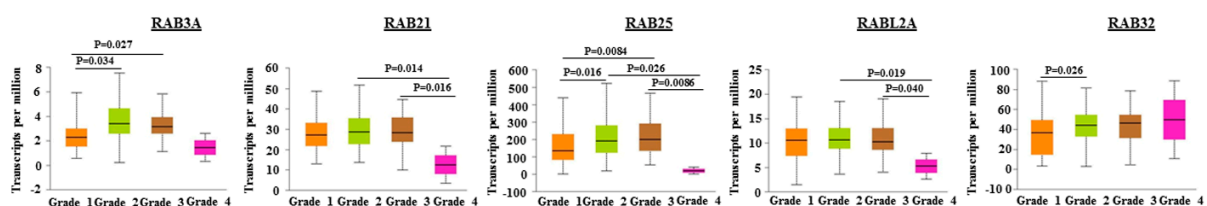**Tumor grade-specific expression**

Figure S1. Association of transcript levels of *RAB3A*, *RAB21*, *RAB25*, *RABL2A*, *RABL2B* and *RAB32* with tumor grade and stage of pancreatic adenocarcinoma. Statistically significant tumor stage- and grade-specific association of some *RAB* genes was detected, but no clear pattern of association was evident. Stage 1 ($n = 6$), stage 2 ($n = 146$),

stage 3 (*n* = 4) and stage 4 (*n* = 4). Grade 1- well differentiated (*n* = 31), grade 2-moderately differentiated (*n* = 95), grade 3- poorly differentiated (*n* = 48) and grade 4- undifferentiated (*n* = 2).
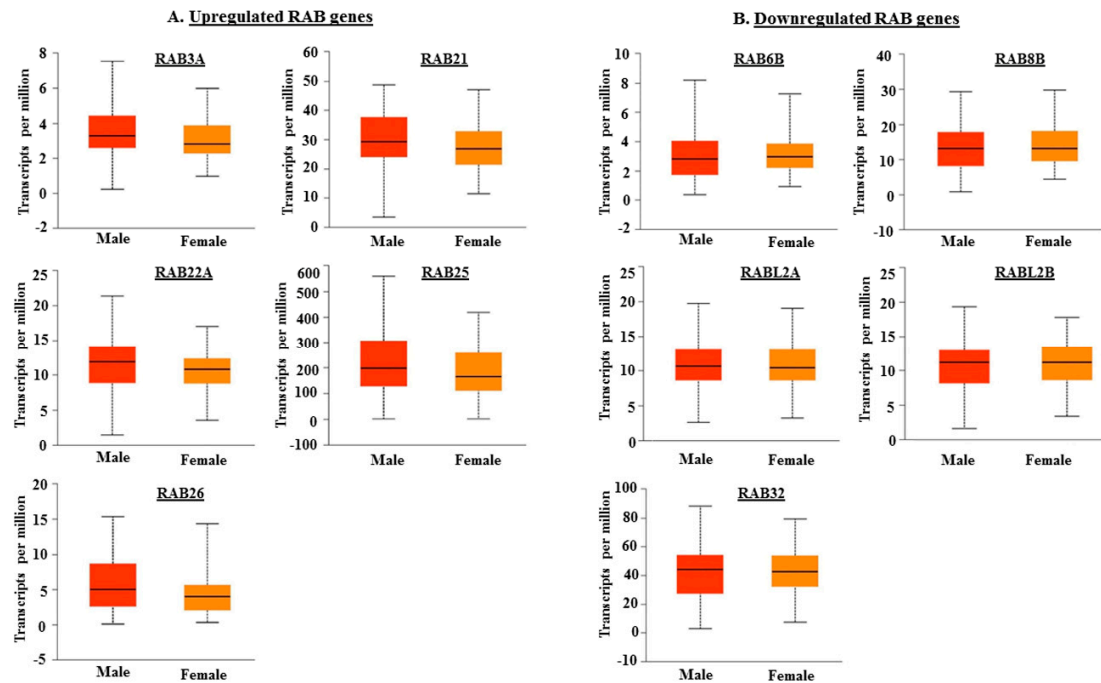

Figure S2. Gender-based differential expression of *RAB* genes. Transcript levels of (**A**) upregulated (*RAB3A, RAB21, RAB22A, RAB25* and *RAB26*) and (**B**) downregulated (*RAB6B, RAB8B, RABL2A, RABL2B* and *RAB32*) RABs in PDAC were examined for gender-specific differences. Male (*n* = 97); Female (*n* = 80). No significant association was observed.