Supplemental Figure 2. Alignments between scaffolds containing more than one disagreement with the BEAT consensus sequence, the BEAT consensus, and the human reference. Scaffolds that meet these criteria were found to belong to two categories: likely paralogs, and possible assembly errors. Paralogs are indicated when the entire sequence can be reconstructed from shotgun sequence reads, while assembly errors are marked by regions of scaffold-read disagreement. All alignments to scaffolds shown were conducted with BWA-MEM (Li 2013), and used only the original reads from Perry, Reeves et al. (2012). Titles with a light blue border indicate likely paralogs, while titles with a red border indicate possible assembly error.

CDH23 Scaffold with disagreement 1

Human	CCTCTCACGGTGCTCAATGGGCCCATCCTGGCCCTGGATGCAGACCAAGACATCTACGCCGTGGTGACCTACCAGCTGCTGGGTGCCCAGAGTGGCCTCTTTGACATCAACAGCAGCACCGGTG
BEAT	CCCCTCACGGTGCTCAATGGGCCCATCCTGGCCCTGGATGCAGACCAGGACATCTACGCCGTGGTGACCTACCGGCTGCTGGGCACCCAGAGTGGCCTTTTTGACATCAACAGCAGCACTGGCG
Scaffold	1 11 21 31 41 51 61 71 81 91 101 111 121
	CCCCTCACGGTGCTCAATGGGCCCATCCTGGCCCTGGATGCAGACCAGGACATCTACGCCGTGGTGACCTACCGGCTGCTGGGCAGCTCTTCCGATCTTTTTGACATCAACAGCAGCACTGGTGNN

CDH23 Scaffold with disagreement 2

Human	ATGCTGGTGGGGATCCGGGTGCTGGACATCAACGACAACGACCCTGTGCTGCTGAACCTGCCCATGAACATCACCATCAGCGAGAACAGCCCTGTCTCCAGCTTTGTCGCCCATGTCCTGGCCAGTGACGCTGACAGTGGCTGCAATGCACGCCTCACCTTCAACATCACTGCGGGCAACCGCGAGCGGGCCTTCTT
BEAT	ATGTTGGTGGGGATCCGGGTGCTGGATATCAACGACAACGACCCCGTGCTGCTGAACCTGCCCATGAACATCACCATCAGTGAGAACAGCCCCGTCTCCAGCTTCGTTGCCCACATCCTGGCCAGCGATGCAGACAGTGGCTGCAACGCGCTCCTCACCTTCAACATCACTGCAGGCAACCGCGAGCGGGCCTTCTC
Scaffold	ATGTTGGTGGGGATCCGGGTGCTGGATATCAACGACAACGACCCCGTGCTGCTGAACCTGCCCATGAACATCACCATCAGTGAGAACAGCCCTGTCTCCAGCTTTGTCGCCCACGTCCTGGCCAGCGACCCTGACAGTGGCTGCAATGCACGCCTCACCTTCAACATCACTGCAGGCAACCGCGAGCGGGCCTTCTTN

Scaffold position ruler: 1 11 21 31 41 51 61 71 81 91 101 111 121 131 141 151 161 171 181 191

BWA alignment to scaffold

KCNQ4 Scaffold with disagreement

Human	GCCGCGGGTACCCAGGGCAACATCTTCGCCACGTCCGCGCTGCGCAGCATGCGCTTCCTGCAGATCCTGCGCATGGTGCGCATGGACCGCCGCGGCGGCACCTGGAAGCTGCTGGGCTCAGTGGTCTACGCGCATAGCAAGG
BEAT	GCTGCGGGCACACAGGGCAACATCTTCGCCACGTCTGCGCTGCGCAGCATGCGCTTCCTGCAGATCCTGCGCATGCTGCGGATGGACCGGAGGGGCGGCACCTGGAAGCTGCTGGGCTCGGTGGTCTACGCGCACAGCAAGG
Scaffold	

OTOF Scaffold with disagreement

PCDH15 Scaffold with disagreement

Human	TATACATTGAGATTCAGGATGAAAATAATCATCCCCCAGTGTTTCAGAAAAAATTCTACATCGGAGGTGTATCTGAAGATGCAAGAATGTTTACTTCTGTACTCAGAGTGAAGG
BEAT	TATACATTGAAATTCAGGATGAAAACGATCATGCCCCAGTGTTTCAGAAAAAATTCTACATTGGTGGCGTATCTGAAGATGCAAGAATGTTTGCTTCTGTGCTCAGAGTTAAGG
Scaffold	TATACATTGAAATTCAGGATGAAAATGATCATCCTCCAGTGTTTCAGAAAAAATTCTACATTGGAGGTGTATCTGAAGACGCAAGAATGTTTGCTTCTGTGCTCAGAGTTANNN

BWA alignment to scaffold

SLC26A5 Scaffold with disagreement

Human	AGTTTTGCCTAGGTGTCTGTAGGTTTGGATTTGTGGCCATATATCTCACAGAGCCTCTGGTCCGTGGGTTTACCACCGCAGCAGCTGTGCATGTCTTCACCTCCATGTTAAAATATCTGTTTGGAGTTAAAACAAAGCGGTACAGTGGAATCTTTTCCGTGGTGTATAGTA
BEAT	AGGTTTGCCTAGGTGTCTGTAGGTTCGGATTTGTGGCCATATATCTCACAGAGCCTCTGGTCCGTGGGTTTACCACCGCCGCAGCTGTGCATGTCTTNNNNCCATGTTAAAATACCTGTTTGGAGTTAAAACAAAGCGGTACAGTGGGATCTTTTCAGTGGTTTATGTAC
Scaffold	AGTTTTGCCTAGGTGTCTGTAGGTTCGGATTTGTGGCCATATATCTCACAGAGCCTCTGGTCCGTGGGTTTACCACTGCAGCAGCTGTGCATGTCTTCACCTCCATGTTAAAATACCTGTTTGGAGTTAAAACAAAGCGGTACAGTGGGATCTTTTCAGTGGTTTATGTAC

BWA alignment to scaffold

Human	AGGAGTTTGTGAGGCTGACAGTCTCTGATGTTCTGACCACCTACGTCACAATCCTCATTGGGGACTTTCTAAGGGCATGTTTTGTGAGGTTTTGCAATTATTGCTGGTGCTGGGACTTGGAGTATGGATAT
BEAT	AGGAATTTGTTCGGCTGACCGTCTCTGATGTTCTGACCACCTACGTCACAATCCTCATTGGGGACTTTCTCAGGGCATGTTTTGTGAGGTTTTGCAATTACTGCTGGTGCTGGGATTTGGAATACGGATAT
Scaffold	AGGAATTTGTGCAGCTGACCGTCTCTTATGTCCTGACCACCTATGTCACAATCCTCATTGGGGACTTTCTCAGGGCATGTTTTGTGAGGTTTTGCAATTACTGCTGGTGCTGGGATTTGGAATACGGATATNNN
BWA alignment to scaffold	