

(A)

Recurrent Fusion	Target fusion junction sequence
CCDC32-CBX3	CTCAGATTCCAATGAAAATGTTGAGAGCGCTGACTCTACAGCCACAAGATCTGGCCAGGATCTCTGGG CTGAAATTGTCCTGTCTGCCAACCTGAACAAGAAGATGGTGCACAAATGCATTCTCAGACTCCTT GTGGATTCTGCCCTGAAGGTGAAGGCCAGAGGGAGGTGGCTGACTTGCTGTCCAGCCAGCTGTAAAG CCTTGGGCTCCCTGCAAGGATTCAAGAGTGTATTAGCATCTCTAGCCATTATTTAAAAATATTCCTG ACTTCGGATGTGGCTTGAGCTGTAG GCGCGGAGGGCCGGAGACGCTGCAGACCCCGCACCCGGAGCA GCTCGGAGGCCGTGAATAATAGCTCTCAAGTCTGCAATAAAAATGGCCTCAACAAAACATTCAGCAA AAAATGGGAAAAAAACAGAATGGAAGAGTAAAGAGTGAAGAGGCAGAGCCTGAAGAATTGTCGTGG AAAAGTACTAGATCGACGTGTAGTGAATGGGAAAGTGGAAATTCTCTGAAGTGGAAAGGGATTACAGAT GCTGACAATACTTGGGAACCTGAAGAAAATTAGATTGTCCAGAATTGATTGAAGCGTTCTTAACCTCAG AAAGCTGGCAAAGAAAAGATGGTACAAGAAAAGAAAATC
SAMD5-SASH1	CGGGAGCAGACGCCAACGCCGCCCTACTTCACGCTTGAGCCGCAGCCGGCGCCCCCCC CGCCCGCCGACGCCGTCCCCACCGGCCGCCGGGGAGCCGTGCAGGGGGGGGGGGGGGGGGGGGGGGGG GCGGGGACTCTCGCGGCCACACGACCGCCCCCGCAGCAGGGAGCTGGTGA GCTGAAGATCATGATCAGGGATAAGCTCGTCCGTGACGGCATC CACCTGAGCAAGCCCCCGTACTCCG CAAGGACGGTTCACTGGAAACATCGATGACCTGGCGCAGCAGTATGCA GATTATTACACACCTGTT TCCGACGTGTGCGAGAGGATGGAGGGAGCTGCGGAAACGGGGTTCCCAAGGACTGGAGTGGAGAA ACCGATGCTAGCCCCACGTCACTTCAGCTGCCAGATCGAAGAGTCGCTGGCTCTGTAGCGC CGTGTCAACCCCAGAAGTGGAAAGAAAGAACCCCTCTCATAAATCAAACACTAGAAGACAGCTGTAGGA AAAGGAGACT

(B)

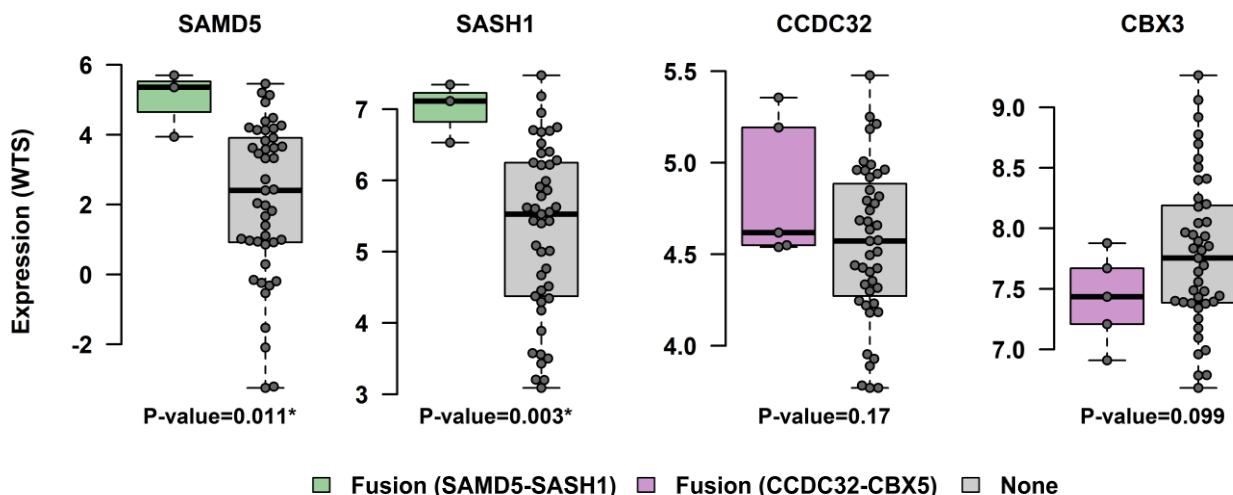


Figure S3. (A) The junction sequence of two recurrent fusions. (B) Expression profiles of genes having SMAD5-SASH1 or CCDC32-CBX3 fusion. Expression level of SASH1 and SAMD5 genes is higher in patients with SAMD5-SASH1 fusion.