TP53 and *NRAS* are the most frequently mutated genes in stool DNA of CRC patients from central part of Iran

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Supplementary Table 1. Hotspot and novel mutation seen in the stool DNA of Iranian colorectal cancer patients and healthy controls

	Iranian CRC patients							Iranian controls					
Gene	**Mutation**	**Protein ID**	**Stage**	**No of patients**		**Mutation type**	**SIFT/ PROVEAN prediction**	**Mutation**	**Protein ID**	**No of individuals**		**Mutation type**	**SIFT/PROVEAN prediction**
ALK	p.L1165P	ENSP00000373700	I	1	T42	Novel	D	p.E1197K	ENSP00000373700	1	C16	COSMIC	D
	p.S1189A	ENSP00000373700	II	1	T20	Novel	T						
BRAF	p.G606R	ENSP00000288602	II	1	T1	COSMIC	D	p.T599I	ENSP00000288602	1	C16	COSMIC	D
DDR2	p.A522V	ENSP00000356898	I	1	T42	Novel	D	p.E262*	ENSP00000356898	1	C9	Novel	NA
	p.V236A	ENSP00000356898	II	1	T9	Novel	T	p.F454S	ENSP00000356898	1	C9	Novel	T
	p.I626M	ENSP00000356898	II	1	T9	Novel	T	p.S446F	ENSP00000356898	1	C10	COSMIC	D
	p.Q482*	ENSP00000356898	II	1	T1	Novel	NA	p.F475I	ENSP00000356898	1	C34	Novel	T
	p.G466E	ENSP00	II	2	T36,	Novel	T	p.I638V	ENSP00000356	1	C41	Novel	T

		000356898			T16				898				
	p.D450E	ENSP00000356898	II	2	T36, T16	Novel	T	p.D450E	ENSP00000356898	1	C43	Novel	T
								p.G466E	ENSP00000356898	1	C43	Novel	T
EGFR	p.T783A	ENSP00000275493	II	1	T46	Novel	T	p.Q486*	ENSP00000275493	1	C43	COSMIC	NA
	p.C781fs	ENSP00000275493	II	1	T27	Novel	NA	p.V738I	ENSP00000275493	1	C10	Novel	T
ERBB2	p.G882C	ENSP00000269571	I	3	T29, T30, T35	Novel	D	p.G881R	ENSP00000269571	1	C9	Novel	D
								p.G882C	ENSP00000269571	1	C10	Novel	D
								p.I872V	ENSP00000269571	1	C42	Novel	T
ERBB4	p.C304F	ENSP00000342235	II	1	T9	COSMIC	D	p.F266L	ENSP00000342235	1	C31	Novel	T
	p.E317K	ENSP00000342235	II	1	T1	COSMIC	D	P.S581F	ENSP00000342235	1	C9	Novel	T
								p. S239L	ENSP00000342235	1	C9	COSMIC	D
								p.C230S	ENSP00000342235	2	C9, C11	Novel	D
FBXW7	p.D381H	ENSP00000281	II	1	T45	Novel	D	p.E569G	ENSP00000281708	1	C9	Novel	D

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	p.D380V	ENSP00000281708	II	1	T45	Novel	D	p.T576M	ENSP00000281708	1	C42	Novel	D
	p.H379P	ENSP00000281708	II	1	T45	COSMIC	D						
	p.V501I	ENSP00000281708	II	1	T9	Novel	D						
FGFR1	p.L300P	ENSP00000393312	II	1	T1	Novel	D	p.D165DD	ENSP00000393312	1	C9	COSMIC	T
	p.A299V	ENSP00000393312	II	1	T9	COSMIC	D						
FGFR2	p.P373L	ENSP00000263451	II	1	T9	Novel	D	p.G271R	ENSP00000358058	1	C34	Novel	D
FGFR3	p.M633I	ENSP00000339824	I	1	T30	Novel	D	p.D716G	ENSP00000339824	2	C34, C42	Novel	D
	p.F386L	ENSP00000339824	I	1	T23	COSMIC	T	p.A636V	ENSP00000339824	1	C42	Novel	D
	p.S373G	ENSP00000339824	II	1	T27	COSMIC	T						
	p.S802G	ENSP00000339824	II	1	T27	Novel	T						
	p.F385L	ENSP00	II	1	T9	Novel	T						

		000339824											
	p.V392M	ENSP00000339824	II	1	T1	COSMIC	T						
	p.N655S	ENSP00000339824	II	1	T1	Novel	D						
KRAS	p.E49G	ENSP00000256078	II	1	T9	Novel	D	p.D119G	ENSP00000256078	1	C9	COSMIC	D
	p.G13V	ENSP00000256078	II	1	T15	COSMIC	D						
MAP2K	p.G80S	ENSP00000302486	II	1	T27	COSMIC	D						
MET	p.V1265E	ENSP00000317272	I	1	T30	Novel	D	p.D1117N	ENSP00000317272	1	C9	Novel	D
	p.D990N	ENSP00000317272	I	1	T42	Novel	T	p.R1000K	ENSP00000317272	1	C43	Novel	T
	p.M1268T	ENSP00000317272	I	1	T23	COSMIC	D						
	p.M1247V	ENSP00000317272	II	1	T20	Novel	T						
	p.S349G	ENSP00000317272	II	1	T9	COSMIC	T						

NRAS	p.G12V	ENSP00000358548	II	2	T40, T43	COSMIC	D						
	p.K16R	ENSP00000358548	II	1	T9	Novel	T						
	p.V8M	ENSP00000358548	II	1	T1	Novel	T						
	p.G12S	ENSP00000358548	II	1	T9	COSMIC	D						
	p.Q61K	ENSP00000358548	II	2	T4, T5	COSMIC	D						
	p.G13V	ENSP00000358548	II	1	T13	COSMIC	D						
PIK3CA	p.A1066T	ENSP00000263967	II	1	T9	COSMIC	T	p.S541P	ENSP00000263967	1	C9	Novel	T
								p.A1020V	ENSP00000263967	1	C7	COSMIC	T
PTEN	p.N69S	ENSP00000361021	II	1	T1	Novel	D	p.R234Q	ENSP00000361021	1	C16	COSMIC	T
								p.D236N	ENSP00000361021	1	C27	Novel	T
								p.A3V	ENSP00000361021	1	C42	Novel	T
SMAD4	p.R361H	ENSP00000341	II	1	T43	COSMIC	D	p.V354A	ENSP00000341551	1	C9	Novel	D

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	p.S125N	ENSP00000341551	I	1	T42	Novel	T	p.Q461*	ENSP00000341551	1	C9	Novel	NA
	p.A202H	ENSP00000341551	I	1	T42	Novel	T	p.I182T	ENSP00000341551	1	C27	Novel	T
	p.H132R	ENSP00000341551	II	1	T9	Novel	D	p.M331V	ENSP00000341551	1	C42	Novel	T
	p.R135*	ENSP00000341551	II	1	T9	COSMIC	NA	p.V348I	ENSP00000341551	1	C42	Novel	T
	p.R420H	ENSP00000341551	II	1	T9	COSMIC	D	p.R416G	ENSP00000341551	1	C42	Novel	D
								p.I326M	ENSP00000341551	1	C43	Novel	D
STK11	p.V320A	ENSP00000324856	II	1	T1	Novel	D	p.A205T	ENSP00000324856	1	C9	COSMIC	T
	p.R331Q	ENSP00000324856	II	1	T1	Novel	T	p.V320A	ENSP00000324856	1	C41	Novel	D
	p.Y340H	ENSP00000324856	II	1	T1	Novel	D	p.D355N	ENSP00000324856	1	C42	Novel	T
TP53	p.R273H	ENSP00000269305	II	2	T43, T6	COSMIC	D	p.E285K	ENSP00000269305	1	C9	COSMIC	D
	p.G245S	ENSP00000269305	II	1	T44	COSMIC	D	p.M169T	ENSP00000269305	1	C10	COSMIC	D

	p.R248W	ENSP00000269305	II	2	T4, T40	COSMIC	D	p.T230A	ENSP00000269305	1	C23	COSMIC	D
	p.N235S	ENSP00000269305	II	1	T27	COSMIC	D	p.R273C	ENSP00000269305	1	C33	COSMIC	D
	p.Y205H	ENSP00000269305	II	1	T27	COSMIC	D						
	p.E358K	ENSP00000269305	II	1	T1	COSMIC	T						
	p.G279E	ENSP00000269305	II	1	T1	COSMIC	D						
	p.R273C	ENSP00000269305	II	2	T52, T3	COSMIC	D						
	p.P151S	ENSP00000269305	I	1	T10	COSMIC	D						
	p.E286K	ENSP00000269305	II	1	T5	COSMIC	D						

T, tolerated; D, deleterious.

Legend

Supplementary Table 1 shows the entire list of mutations (COSMIC and Novel) in patients and normal individuals.