

Biological Scoring Part

Experimental Scoring Part

Score	Protein Name	Complex ID	Enzymatic Activity (9)	Cellular Processes (6)	Human Disease (4)	Protein Motif (2)	Interacting Protein (2)	Full c-DNA name (2)	Antibody (2)	KO ES cell (3)
26	SPTAN1	ASC1 NE	1. Actin binding activity 2. Calcium ion binding activity 3. Calmodulin binding activity	1. Barbed-end actin filament capping 2. Tight junction	NO	1. SPECTRIN 2. SH3 3. EF	YES	EHS1001-12305	YES	YES
25	KARS	COREST S100	1. ATP binding activity 2. Lysine-tRNA ligase activity 3. tRNA binding activity	1. Lysyl-tRNA aminoacylation 2. Protein biosynthesis 3. tRNA processing	NO	TRNAA	YES	IHS1380-8840778	NO	NO
24	GAPD	CDK7 NE	1. NAD binding activity 2. Glyceraldehyde-3-phosphate dehydrogenase (phosphorylating) activity 3. Oxidoreductase activity	Glucose metabolism	NO	ACETYLATION domain	YES	MHS1011-60031	YES	YES
24	NCL	CDK7 S100	1. DNA binding activity 2. RNA binding activity	Nuclear mRNA splicing via spliceosome	NO	RRM	YES	NO	YES	YES
24	SFPQ (PSF)	1. COREST NE 2. CRASP2 NE	1. DNA binding activity 2. RNA binding activity	1. DNA recombination 2. DNA repair 3. Nuclear mRNA splicing via spliceosome	NO	RRM	YES	NO	YES	YES
24	IQGAP1 (SAR1)	COREST S100	1. GTPase inhibitor activity 2. Ras-GTPase activator activity 3. Calmodulin binding activity	1. Negative regulation of Ras- signal transduction 2. Small GTPase mediated signal transduction	NO	1. CH 2. WW 3. IQ 4. RASGAP	YES	NO	YES	YES
23	FLNA	ASC1 NE	Actin binding activity	1. Actin cytoskeleton organization and biogenesis 2. Cell motility 3. Cell surface receptor linked signal transduction 4. Neurogenesis 5. Positive regulation of I-kappaB kinase/NF-kappaB cascade	1. Periventricular heterotopia 2. Otopalatodigital syndrome type 1 3. Otopalatodigital syndrome type 2 4. Frontometaphyseal dysplasia 5. Melnick-Needles syndrome	1. CH 2. IGFLMN	YES	NO	NO	NO
23	ANXA2	CDK7 NE	1. Calcium ion binding activity 2. Calcium-dependent phospholipid binding activity 3. Cytoskeletal protein binding activity 4. Phospholipase inhibitor activity	Skeletal development	NO	ANX	YES	MHS1011-76690	YES	NO
23	CAD	SRC-2 S100	1. ATP binding activity 2. Amino acid binding activity 3. Aspartate carbamoyltransferase activity 4. Carbamoyl-phosphate synthase (glutamine-hydrolyzing) activity 5. Dihydroorotase activity 6. Hydrolase activity	1. 'de novo' pyrimidine base biosynthesis 2. Amino acid metabolism 3. Nitrogen compound metabolism	NO		YES	MHS1010-9206052	YES	YES
22	LARS	COREST S100	1. ATP binding activity 2. Leucine-tRNA ligase activity	tRNA aminoacylation for protein translation	NO		YES	IHS1382-8393442	NO	YES
22	NONO	CRASP2 NE	1. DNA binding activity 2. RNA binding activity 3. SH3/SH2 adaptor activity	1. DNA recombination 2. DNA repair 3. RNA splicing 4. Regulation of DNA-dependent transcription	NO	RRM	YES	NO	NO	YES
20	EPRS	COREST S100	1. ATP binding activity 2. Glutamate-tRNA ligase activity 3. Proline-tRNA ligase activity	1. Glutamyl-tRNA aminoacylation 2. Prolyl-tRNA aminoacylation 3. Protein biosynthesis	NO		YES	NO	NO	YES
15	CLTC	ASC-1 NE	NO	Intracellular protein transport	NO	CLH	YES	MHS1010-9205173	NO	YES