





# PROTEOME<sup>™</sup> (HumanPSD<sup>™</sup>+TRANSPATH<sup>®</sup>) release 2018.1

The Human Proteome Survey Database (HumanPSD<sup>™</sup>) with focus on human proteins as disease biomarkers and drug targets contains these new data features:

### • Improved biomarker retrieval from disease reports

Biomarkers can be retrieved by type of association with the disease or by indication for the utility of the biomarker, matching the categories of the biomarker association table in a disease report. The sets of biomarkers can be exported or used as input for the PathwayBuilder visualization tool or processed by other tools.

## • Increased number of conditions in clinical trials mapped to diseases

New data from <u>clinicaltrials.gov</u> and manual curation by experts has increased the number of Clinical Trial-Disease assignments to 664,258, leading to 362,881 CT-Disease-Drug assignments.

The TRANSPATH<sup>®</sup> database on mammalian signal transduction and metabolic pathways contains these new data features:

### • Cancer pathway list

The canonical signal transduction pathway overview page now contains a section for pathways involved in the development of various types of cancer.







# **PROTEOME™** Statistics

<b>HumanPSD™</b> Proteins		Human		Mouse		Rat		
Proteins Mature miRNAs		20,005		20,236		12,998		
Diseases / Disease Models		2,589		1,911		766		
Diseases / Disease Models Drugs		2,552		1,308		-		
References		8,199 218.005			-			-
GO Assignments		218,095			103,300		55,975	
Expression Assignments		235,395			232,624			112,843
		182,602			180,026			99,363
Gene-disease Assignments		110,183		6,273		-		
Drug-protein Interactions		14,212		-			-	
Clinical Trials		362,881		-			-	
Clinical Trial – Disease Assignments		664,258		-		-		
Clinical Trial – Drug Assignments		169,619		-		-		
Phenotype Assignments		-			63,141			-
Annotations		455,930		299,381		193,748		
TRANSPATH®								
Molecules	370,85	8		Pathways		190		
Genes	108,85			, Chains		1,526		
<b>D</b>	F00 16			References			68,663	
Reactions	580,16	L .			Referen	ices		06,005
Reactions	Sou, 10		S. pom	be			gens	·
	S. cerevisiae		<b>S. pom</b> 4,998	be	Fungal		gens	C. elegans
YEAST & WORM			<b>S. pom</b> 4,998 4,600	be			gens	·
<b>YEAST &amp; WORM</b> Proteins	<b>S. cerevisiae</b> 6,689		4,998		<b>Fungal</b> 19,932	Pathog	gens	<b>C. elegans</b> 20,745
<b>YEAST &amp; WORM</b> Proteins References	<b>S. cerevisiae</b> 6,689 36,686 90,178		4,998 4,600		<b>Fungal</b> 19,932 4,455	Pathog	gens	<b>C. elegans</b> 20,745 6,485
<b>YEAST &amp; WORM</b> Proteins References GO Assignments	<b>S. cerevisiae</b> 6,689 36,686 90,178		4,998 4,600 36,236		<b>Fungal</b> 19,932 4,455 103.16 2,754	Pathog	gens	<b>C. elegans</b> 20,745 6,485 82,733
<b>YEAST &amp; WORM</b> Proteins References GO Assignments Phenotype Assignments	<b>S. cerevisiae</b> 6,689 36,686 90,178 59,439 877,922		4,998 4,600 36,236 9,834		<b>Fungal</b> 19,932 4,455 103.16	Pathog	gens	<b>C. elegans</b> 20,745 6,485 82,733 20,272
YEAST & WORM Proteins References GO Assignments Phenotype Assignments Annotations Expression Assignments	<b>S. cerevisiae</b> 6,689 36,686 90,178 59,439 877,922		4,998 4,600 36,236 9,834		<b>Fungal</b> 19,932 4,455 103.16 2,754	Pathog 7		<b>C. elegans</b> 20,745 6,485 82,733 20,272 325,258 9,512
YEAST & WORM Proteins References GO Assignments Phenotype Assignments Annotations Expression Assignments PLANT	S. cerevisiae 6,689 36,686 90,178 59,439 877,922 - Arabidopsis	Rice	4,998 4,600 36,236 9,834 99,501	Maize	<b>Fungal</b> 19,932 4,455 103.16 2,754	Pathog 7 Soybe	an	<b>C. elegans</b> 20,745 6,485 82,733 20,272 325,258 9,512 <b>Sorghum</b>
YEAST & WORM Proteins References GO Assignments Phenotype Assignments Annotations Expression Assignments PLANT Proteins	<b>S. cerevisiae</b> 6,689 36,686 90,178 59,439 877,922 - <b>Arabidopsis</b> 26,856	<b>Rice</b> 26,829	4,998 4,600 36,236 9,834 99,501 -	<b>Maize</b> 1,706	Fungal 19,932 4,455 103.16 2,754 73,294 -	Pathog 7 <b>Soybe</b> 66,300	an )	<b>C. elegans</b> 20,745 6,485 82,733 20,272 325,258 9,512 <b>Sorghum</b> 34,005
YEAST & WORM Proteins References GO Assignments Phenotype Assignments Annotations Expression Assignments <b>PLANT</b> Proteins GO Assignments	<b>S. cerevisiae</b> 6,689 36,686 90,178 59,439 877,922 - <b>Arabidopsis</b> 26,856 235,314	<b>Rice</b> 26,829 97,184	4,998 4,600 36,236 9,834 99,501 -	<b>Maize</b> 1,706 10,407	Fungal 19,932 4,455 103.16 2,754 73,294 -	Pathog 7 Soybe	an )	<b>C. elegans</b> 20,745 6,485 82,733 20,272 325,258 9,512 <b>Sorghum</b>
YEAST & WORM Proteins References GO Assignments Phenotype Assignments Annotations Expression Assignments PLANT Proteins	<b>S. cerevisiae</b> 6,689 36,686 90,178 59,439 877,922 - <b>Arabidopsis</b> 26,856 235,314	<b>Rice</b> 26,829	4,998 4,600 36,236 9,834 99,501 -	<b>Maize</b> 1,706	Fungal 19,932 4,455 103.16 2,754 73,294 -	Pathog 7 <b>Soybe</b> 66,300	an )	<b>C. elegans</b> 20,745 6,485 82,733 20,272 325,258 9,512 <b>Sorghum</b> 34,005
YEAST & WORM Proteins References GO Assignments Phenotype Assignments Annotations Expression Assignments <b>PLANT</b> Proteins GO Assignments	<b>S. cerevisiae</b> 6,689 36,686 90,178 59,439 877,922 - <b>Arabidopsis</b> 26,856 235,314	<b>Rice</b> 26,829 97,184	4,998 4,600 36,236 9,834 99,501 -	<b>Maize</b> 1,706 10,407	Fungal 19,932 4,455 103.16 2,754 73,294 -	Pathog 7 <b>Soybe</b> 66,300	an )	<b>C. elegans</b> 20,745 6,485 82,733 20,272 325,258 9,512 <b>Sorghum</b> 34,005
YEAST & WORM Proteins References GO Assignments Phenotype Assignments Annotations Expression Assignments <b>PLANT</b> Proteins GO Assignments Expression Assignments	<b>S. cerevisiae</b> 6,689 36,686 90,178 59,439 877,922 - <b>Arabidopsis</b> 26,856 235,314	<b>Rice</b> 26,829 97,184 22,210	4,998 4,600 36,236 9,834 99,501 -	<b>Maize</b> 1,706 10,407	Fungal 19,932 4,455 103.16 2,754 73,294 -	Pathog 7 <b>Soybe</b> 66,300 254,10	an )	<b>C. elegans</b> 20,745 6,485 82,733 20,272 325,258 9,512 <b>Sorghum</b> 34,005
YEAST & WORM Proteins References GO Assignments Phenotype Assignments Annotations Expression Assignments PLANT Proteins GO Assignments Expression Assignments Expression Assignments	<b>S. cerevisiae</b> 6,689 36,686 90,178 59,439 877,922 - <b>Arabidopsis</b> 26,856 235,314 383,973 Pathwa	<b>Rice</b> 26,829 97,184 22,210	4,998 4,600 36,236 9,834 99,501 -	<b>Maize</b> 1,706 10,407	Fungal 19,932 4,455 103.16 2,754 73,294 -	Pathog 7 <b>Soybe</b> 66,300 254,10	<b>an</b> ) )7	<b>C. elegans</b> 20,745 6,485 82,733 20,272 325,258 9,512 <b>Sorghum</b> 34,005

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http://genexplain.com/humanpsd http://genexplain.com/transpath