

## Protein Genome Map 2025.2

The first version of the database focuses on post-translational modifications (PTMs) and contains 234192 PTM sites for 18 different modification types in 973 Drosophila, 23630 human, 5414 mouse and 39 rat protein isoforms from Transpath and BioGRID as well as their genomic locations in assemblies BDGP6.54, GRCh38, GRCm39 and GRCr8. The modification types and their presentation in the database are described in the table below.

PTM type	Transpath®	BioGRID	Human - Transpath®	Human - BioGRID
Acetylation	165		146	
Acylation	2		2	
Glycosylation	30		27	
Hydroxylation	7		7	
ISGylation (ISG15)	3		3	
Methylation	59		55	
Myristoylation	5		4	
Neddylation (Nedd8)	2	1750	2	1750
Nitrosylation	5		4	
Palmitoylation	5		1	
Serine phosphorylation	1612	19536	1373	19536
Sulfation	1		1	
Sumoylation (any)		217		
Sumoylation (SUMO1)	119		84	
Sumoylation (SUMO2)	33		24	
Sumoylation (SUMO3)	20		11	
Threonine phosphorylation	450	3813	356	3813
Tyrosine phosphorylation	315	520	257	520
Ubiquitination	134	205666	109	191351