

itl_glossary_60-terms-webflow_enhanced							
Name	Slug	Category	URL	Short Definition	Long Definition	Key Takeaways	Applications
Related Terms	Meta Title						
Point Mutation	point-mutation	Core genetics & mechanisms	/mouse-genetics-glossary/point-mutation				Point Mutation Mouse Genetics Glossary
Mis sense / Nonsense / Synonymous Mutation	misense-nonsense-synonymous-mutation	Core genetics & mechanisms	/mouse-genetics-glossary/misense-nonsense-synonymous-mutation				Mis sense / Nonsense / Synonymous Mutation Mouse Genetics Glossary
Frameshift Mutation	frameshift-mutation	Core genetics & mechanisms	/mouse-genetics-glossary/frameshift-mutation				Frameshift Mutation Mouse Genetics Glossary
Gain-of-Function vs Loss-of-Function	gain-of-function-vs-loss-of-function	Core genetics & mechanisms	/mouse-genetics-glossary/gain-of-function-vs-loss-of-function				Gain-of-Function vs Loss-of-Function Mouse Genetics Glossary
Allele / Genotype / Phenotype	allele-genotype-phenotype	Core genetics & mechanisms	/mouse-genetics-glossary/allele-genotype-phenotype				Allele / Genotype / Phenotype Mouse Genetics Glossary
Promoter / Enhancer / Regulatory Element	promoter-enhancer-regulatory-element	Core genetics & mechanisms	/mouse-genetics-glossary/promoter-enhancer-regulatory-element				Promoter / Enhancer / Regulatory Element Mouse Genetics Glossary
Open Reading Frame (ORF)	open-reading-frame	Core genetics & mechanisms	/mouse-genetics-glossary/open-reading-frame				Open Reading Frame (ORF) Mouse Genetics Glossary
Homologous Recombination	homologous-recombination	Core genetics & mechanisms	/mouse-genetics-glossary/homologous-recombination				Homologous Recombination Mouse Genetics Glossary
Non-Homologous End Joining (NHEJ)	non-homologous-end-joining	Core genetics & mechanisms	/mouse-genetics-glossary/non-homologous-end-joining				Non-Homologous End Joining (NHEJ) Mouse Genetics Glossary
Homology-Directed Repair (HDR)	homology-directed-repair	Core genetics & mechanisms	/mouse-genetics-glossary/homology-directed-repair				Homology-Directed Repair (HDR) Mouse Genetics Glossary
Mosaicism (Genetic Mosaic)	mosaicism	Core genetics & mechanisms	/mouse-genetics-glossary/mosaicism				Mosaicism (Genetic Mosaic) Mouse Genetics Glossary
Germline Transmission	germline-transmission	Core genetics & mechanisms	/mouse-genetics-glossary/germline-transmission				Germline Transmission Mouse Genetics Glossary
Knockout (KO)	knockout	Mouse model strategies & allele types	/mouse-genetics-glossary/knockout				Knockout (KO) Mouse Genetics Glossary
Conditional Knockout (cKO)	conditional-knockout	Mouse model strategies & allele types	/mouse-genetics-glossary/conditional-knockout				Conditional Knockout (cKO) Mouse Genetics Glossary
Conventional (Constitutive) Knockout	conventional-knockout	Mouse model strategies & allele types	/mouse-genetics-glossary/conventional-knockout				Conventional (Constitutive) Knockout Mouse Genetics Glossary
Knockin (KI)	knockin	Mouse model strategies & allele types	/mouse-genetics-glossary/knockin				Knockin (KI) Mouse Genetics Glossary
Humanized Mouse (Gene/Immune Component)	humanized-mouse	Mouse model strategies & allele types	/mouse-genetics-glossary/humanized-mouse				Humanized Mouse (Gene/Immune Component) Mouse Genetics Glossary
Reporter Gene / Reporter Allele	reporter-gene-reporter-allele	Mouse model strategies & allele types	/mouse-genetics-glossary/reporter-gene-reporter-allele				Reporter Gene / Reporter Allele Mouse Genetics Glossary
Inducible Allele (e.g., Cre-ER⁺ Systems)	inducible-allele	Mouse model strategies & allele types	/mouse-genetics-glossary/inducible-allele				Inducible Allele (e.g., Cre-ER ⁺ Systems) Mouse Genetics Glossary
Hypomorphic / Null Allele	hypomorphic-null-allele	Mouse model strategies & allele types	/mouse-genetics-glossary/hypomorphic-null-allele				Hypomorphic / Null Allele Mouse Genetics Glossary
Dominant Negative	dominant-negative	Mouse model strategies & allele types	/mouse-genetics-glossary/dominant-negative				Dominant Negative Mouse Genetics Glossary
Rescue Allele / Complementation	rescue-allele-complementation	Mouse model strategies & allele types	/mouse-genetics-glossary/rescue-allele-complementation				Rescue Allele / Complementation Mouse Genetics Glossary
Safe Harbor Locus	safe-harbor-locus	Mouse model strategies & allele types	/mouse-genetics-glossary/safe-harbor-locus				Safe Harbor Locus Mouse Genetics Glossary
Rosa26 Locus	rosa26-locus	Mouse model strategies & allele types	/mouse-genetics-glossary/rosa26-locus				Rosa26 Locus Mouse Genetics Glossary
Cre-lox System	cre-lox-system	Recombination systems & tools	/mouse-genetics-glossary/cre-lox-system				Cre-lox System Mouse Genetics Glossary
Cre Driver Line (Tissue-Specific Cre)	cre-driver-line	Recombination systems & tools	/mouse-genetics-glossary/cre-driver-line				Cre Driver Line (Tissue-Specific Cre) Mouse Genetics Glossary
Floxed Gene / loxP Site	floxed-gene-loxp-site	Recombination systems & tools	/mouse-genetics-glossary/floxed-gene-loxp-site				Floxed Gene / loxP Site Mouse Genetics Glossary
Lox-STOP-Lox (LSL) Cassette	lox-stop-lox-cassette	Recombination systems & tools	/mouse-genetics-glossary/lox-stop-lox-cassette				Lox-STOP-Lox (LSL) Cassette Mouse Genetics Glossary
Flp-FRT System	flp-frt-system	Recombination systems & tools	/mouse-genetics-glossary/flp-frt-system				Flp-FRT System Mouse Genetics Glossary
Dre-rox System (Alternate Recombinase)	dre-rox-system	Recombination systems & tools	/mouse-genetics-glossary/dre-rox-system				Dre-rox System (Alternate Recombinase) Mouse Genetics Glossary
Tet-On / Tet-Off (Tetracycline Systems)	tet-on-tet-off	Recombination systems & tools	/mouse-genetics-glossary/tet-on-tet-off				Tet-On / Tet-Off (Tetracycline Systems) Mouse Genetics Glossary
Inducible Cre (Cre-ERT2 / Tamoxifen)	inducible-cre	Recombination systems & tools	/mouse-genetics-glossary/inducible-cre				Inducible Cre (Cre-ERT2 / Tamoxifen) Mouse Genetics Glossary
Inversion vs Excision (Recombination Outcomes)	inversion-vs-excision	Recombination systems & tools	/mouse-genetics-glossary/inversion-vs-excision				Inversion vs Excision (Recombination Outcomes) Mouse Genetics Glossary
Recombination "Leakiness" (Background Activity)	recombination-leakiness	Recombination systems & tools	/mouse-genetics-glossary/recombination-leakiness				Recombination "Leakiness" (Background Activity) Mouse Genetics Glossary
Targeting Vector (Homology Arms)	targeting-vector	Vectors, ES cells & delivery	/mouse-genetics-glossary/targeting-vector				Targeting Vector (Homology Arms) Mouse Genetics Glossary
Selection Markers (Neo^r, Puro^r)	selection-markers	Vectors, ES cells & delivery	/mouse-genetics-glossary/selection-markers				Selection Markers (Neo ^r , Puro ^r) Mouse Genetics Glossary
Embryonic Stem (ES) Cell Targeting	embryonic-stem-cell-targeting	Vectors, ES cells & delivery	/mouse-genetics-glossary/embryonic-stem-cell-targeting				Embryonic Stem (ES) Cell Targeting Mouse Genetics Glossary
Blastocyst Injection / Chimera Production	blastocyst-injection-chimera-production	Vectors, ES cells & delivery	/mouse-genetics-glossary/blastocyst-injection-chimera-production				Blastocyst Injection / Chimera Production Mouse Genetics Glossary
Pronuclear Injection (Transgenics)	pronuclear-injection	Vectors, ES cells & delivery	/mouse-genetics-glossary/pronuclear-injection				Pronuclear Injection (Transgenics) Mouse Genetics Glossary
Single-Copy Integration	single-copy-integration	Vectors, ES cells & delivery	/mouse-genetics-glossary/single-copy-integration				Single-Copy Integration Mouse Genetics Glossary
Large-Fragment / BAC Targeting	large-fragment-bac-targeting	Vectors, ES cells & delivery	/mouse-genetics-glossary/large-fragment-bac-targeting				Large-Fragment / BAC Targeting Mouse Genetics Glossary
Safe-Harbor Targeted Transgenesis	safe-harbor-targeted-transgenesis	Vectors, ES cells & delivery	/mouse-genetics-glossary/safe-harbor-targeted-transgenesis				Safe-Harbor Targeted Transgenesis Mouse Genetics Glossary
Genotyping PCR / qPCR	genotyping-pcr-qpcr	Validation, QC & genotyping	/mouse-genetics-glossary/genotyping-pcr-qpcr				Genotyping PCR / qPCR Mouse Genetics Glossary
Southern Blot / Copy Number Confirmation	southern-blot-copy-number-confirmation	Validation, QC & genotyping	/mouse-genetics-glossary/southern-blot-copy-number-confirmation				Southern Blot / Copy Number Confirmation Mouse Genetics Glossary
Sanger / NGS Validation of Junctions	sanger/ngs-validation-of-junctions	Validation, QC & genotyping	/mouse-genetics-glossary/sanger/ngs-validation-of-junctions				Sanger / NGS Validation of Junctions Mouse Genetics Glossary
Off-Target Assessment / Allele Integrity	off-target-assessment-allele-integrity	Validation, QC & genotyping	/mouse-genetics-glossary/off-target-assessment-allele-integrity				Off-Target Assessment / Allele Integrity Mouse Genetics Glossary
Germline Confirmation / Coat Color Markers	germline-confirmation-coat-color-markers	Validation, QC & genotyping	/mouse-genetics-glossary/germline-confirmation-coat-color-markers				Germline Confirmation / Coat Color Markers Mouse Genetics Glossary
Breeding Scheme (Hetero x Hetero, etc.)	breeding-scheme	Validation, QC & genotyping	/mouse-genetics-glossary/breeding-scheme				Breeding Scheme (Hetero x Hetero, etc.) Mouse Genetics Glossary
Colony Management / Backcrossing	colony-management-backcrossing	Validation, QC & genotyping	/mouse-genetics-glossary/colony-management-backcrossing				Colony Management / Backcrossing Mouse Genetics Glossary
Zygosity (Heterozygous vs Homozygous)	zygosity	Validation, QC & genotyping	/mouse-genetics-glossary/zygosity				Zygosity (Heterozygous vs Homozygous) Mouse Genetics Glossary
Humanized Immune Checkpoint (PD-1 / PD-L1 / CTLA-4)	humanized-immune-checkpoint	Immunology & humanization	/mouse-genetics-glossary/humanized-immune-checkpoint				Humanized Immune Checkpoint (PD-1 / PD-L1 / CTLA-4) Mouse Genetics Glossary
Cytokine / Receptor Humanization	cytokine-receptor-humanization	Immunology & humanization	/mouse-genetics-glossary/cytokine-receptor-humanization				Cytokine / Receptor Humanization Mouse Genetics Glossary
HLA Humanized Models	hla-humanized-models	Immunology & humanization	/mouse-genetics-glossary/hla-humanized-models				HLA Humanized Models Mouse Genetics Glossary
Single vs Double Humanized Targets	single-vs-double-humanized-targets	Immunology & humanization	/mouse-genetics-glossary/single-vs-double-humanized-targets				Single vs Double Humanized Targets Mouse Genetics Glossary
Graft-versus-Host / Engraftment Considerations	graft-versus-host-engraftment-considerations	Immunology & humanization	/mouse-genetics-glossary/graft-versus-host-engraftment-considerations				Graft-versus-Host / Engraftment Considerations Mouse Genetics Glossary
Baseline Phenotyping	baseline-phenotyping	Study design & applications	/mouse-genetics-glossary/baseline-phenotyping				Baseline Phenotyping Mouse Genetics Glossary
Tissue-Specific Knockout (Examples: Liver, Neuron)	tissue-specific-knockout	Study design & applications	/mouse-genetics-glossary/tissue-specific-knockout				Tissue-Specific Knockout (Examples: Liver, Neuron) Mouse Genetics Glossary
Temporal Control (Induction Windows, Dosing)	temporal-control	Study design & applications	/mouse-genetics-glossary/temporal-control				Temporal Control (Induction Windows, Dosing) Mouse Genetics Glossary
Reporter Readouts (GFP, LacZ, Luc)	reporter-readouts	Study design & applications	/mouse-genetics-glossary/reporter-readouts				Reporter Readouts (GFP, LacZ, Luc) Mouse Genetics Glossary
Translational Relevance / Disease Modeling	translational-relevance-disease-modeling	Study design & applications	/mouse-genetics-glossary/translational-relevance-disease-modeling				Translational Relevance / Disease Modeling Mouse Genetics Glossary

Meta Description	Schema JSON-LD	Status
Learn how Point Mutation fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Point Mutation", "url": "/mouse-genetics-glossary/point-mutation", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Missense / Nonsense / Synonymous Mutation fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Missense / Nonsense / Synonymous Mutation", "url": "/mouse-genetics-glossary/missense-nonsense-synonymous-mutation", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Frame-shift Mutation fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Frame-shift Mutation", "url": "/mouse-genetics-glossary/frame-shift-mutation", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Gain-of-Function vs Loss-of-Function fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Gain-of-Function vs Loss-of-Function", "url": "/mouse-genetics-glossary/gain-of-function-vs-loss-of-function", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Allele / Genotype / Phenotype fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Allele / Genotype / Phenotype", "url": "/mouse-genetics-glossary/allele-genotype-phenotype", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Promoter / Enhancer / Regulatory Element fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Promoter / Enhancer / Regulatory Element", "url": "/mouse-genetics-glossary/promoter-enhancer-regulatory-element", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Open Reading Frame (ORF) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Open Reading Frame (ORF)", "url": "/mouse-genetics-glossary/open-reading-frame", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Homologous Recombination fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Homologous Recombination", "url": "/mouse-genetics-glossary/homologous-recombination", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Non-Homologous End Joining (NHEJ) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Non-Homologous End Joining (NHEJ)", "url": "/mouse-genetics-glossary/non-homologous-end-joining", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Homology-Directed Repair (HDR) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Homology-Directed Repair (HDR)", "url": "/mouse-genetics-glossary/homology-directed-repair", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Mosaicism (Genetic Mosaic) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Mosaicism (Genetic Mosaic)", "url": "/mouse-genetics-glossary/mosaicism", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Germline Transmission fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Germline Transmission", "url": "/mouse-genetics-glossary/germline-transmission", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Knockout (KO) is used to engineer and interpret knockout mouse models in preclinical research.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Knockout (KO)", "url": "/mouse-genetics-glossary/knockout", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Conditional Knockout (cKO) is used to engineer and interpret knockout mouse models in preclinical research.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Conditional Knockout (cKO)", "url": "/mouse-genetics-glossary/conditional-knockout", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Conventional (Constitutive) Knockout is used to engineer and interpret knockout mouse models in preclinical research.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Conventional (Constitutive) Knockout", "url": "/mouse-genetics-glossary/conventional-knockout", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Knockin (KJ) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Knockin (KJ)", "url": "/mouse-genetics-glossary/knockin", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Discover how Humanized Mouse (Gene/Immune Component) supports translational humanized mouse model studies and immunology research.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Humanized Mouse (Gene/Immune Component)", "url": "/mouse-genetics-glossary/humanized-mouse", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Reporter Gene / Reporter Allele fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Reporter Gene / Reporter Allele", "url": "/mouse-genetics-glossary/reporter-gene-reporter-allele", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Inducible Allele (e.g., Cre-ER® Systems) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Inducible Allele (e.g., Cre-ER® Systems)", "url": "/mouse-genetics-glossary/inducible-allele", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Hypomorphic / Null Allele fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Hypomorphic / Null Allele", "url": "/mouse-genetics-glossary/hypomorphic-null-allele", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Dominant Negative fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Dominant Negative", "url": "/mouse-genetics-glossary/dominant-negative", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Rescue Allele / Complementation fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Rescue Allele / Complementation", "url": "/mouse-genetics-glossary/rescue-allele-complementation", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Safe Harbor Locus fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Safe Harbor Locus", "url": "/mouse-genetics-glossary/safe-harbor-locus", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Rosa26 Locus fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Rosa26 Locus", "url": "/mouse-genetics-glossary/rosa26-locus", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Cre-lox System fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Cre-lox System", "url": "/mouse-genetics-glossary/cre-lox-system", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Cre Driver Line (Tissue-Specific Cre) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Cre Driver Line (Tissue-Specific Cre)", "url": "/mouse-genetics-glossary/cre-driver-line", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Floxed Gene / loxP Site fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Floxed Gene / loxP Site", "url": "/mouse-genetics-glossary/floxed-gene-loxp-site", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Lox-STOP-Lox (LSL) Cassette fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Lox-STOP-Lox (LSL) Cassette", "url": "/mouse-genetics-glossary/lox-stop-lox-cassette", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Flp-FRT System fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Flp-FRT System", "url": "/mouse-genetics-glossary/flp-frt-system", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Dre-rox System (Alternate Recombinase) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Dre-rox System (Alternate Recombinase)", "url": "/mouse-genetics-glossary/dre-rox-system", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Tet-On / Tet-Off (Tetracycline Systems) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Tet-On / Tet-Off (Tetracycline Systems)", "url": "/mouse-genetics-glossary/tet-on-tet-off", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Inducible Cre (Cre-ERT2 / Tamoxifen) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Inducible Cre (Cre-ERT2 / Tamoxifen)", "url": "/mouse-genetics-glossary/inducible-cre", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Inversion vs Excision (Recombination Outcomes) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Inversion vs Excision (Recombination Outcomes)", "url": "/mouse-genetics-glossary/inversion-vs-excision", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Recombination "Leakiness" (Background Activity) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Recombination "Leakiness" (Background Activity)", "url": "/mouse-genetics-glossary/recombination-leakiness", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Targeting Vector (Homology Arms) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Targeting Vector (Homology Arms)", "url": "/mouse-genetics-glossary/targeting-vector", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Selection Markers (Neo®, Puro®) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Selection Markers (Neo®, Puro®)", "url": "/mouse-genetics-glossary/selection-markers", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Embryonic Stem (ES) Cell Targeting fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Embryonic Stem (ES) Cell Targeting", "url": "/mouse-genetics-glossary/embryonic-stem-cell-targeting", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Blastocyst Injection / Chimera Production fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Blastocyst Injection / Chimera Production", "url": "/mouse-genetics-glossary/blastocyst-injection-chimera-production", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Pronuclear Injection (Transgenics) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Pronuclear Injection (Transgenics)", "url": "/mouse-genetics-glossary/pronuclear-injection", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Single-Copy Integration fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Single-Copy Integration", "url": "/mouse-genetics-glossary/single-copy-integration", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Large-Fragment / BAC Targeting fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Large-Fragment / BAC Targeting", "url": "/mouse-genetics-glossary/large-fragment-bac-targeting", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Safe-Harbor Targeted Transgenesis fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Safe-Harbor Targeted Transgenesis", "url": "/mouse-genetics-glossary/safe-harbor-targeted-transgenesis", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Genotyping PCR / qPCR fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Genotyping PCR / qPCR", "url": "/mouse-genetics-glossary/genotyping-pcr-qpcr", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Southern Blot / Copy Number Confirmation fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Southern Blot / Copy Number Confirmation", "url": "/mouse-genetics-glossary/southern-blot-copy-number-confirmation", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Sanger / NGS Validation of Junctions fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Sanger / NGS Validation of Junctions", "url": "/mouse-genetics-glossary/sanger/ngs-validation-of-junctions", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Off-Target Assessment / Allele Integrity fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Off-Target Assessment / Allele Integrity", "url": "/mouse-genetics-glossary/off-target-assessment-allele-integrity", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Germline Confirmation / Coat Color Markers fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Germline Confirmation / Coat Color Markers", "url": "/mouse-genetics-glossary/germline-confirmation-coat-color-markers", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Breeding Scheme (Hetero x Hetero, etc.) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Breeding Scheme (Hetero x Hetero, etc.)", "url": "/mouse-genetics-glossary/breeding-scheme", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Colony Management / Backcrossing fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Colony Management / Backcrossing", "url": "/mouse-genetics-glossary/colony-management-backcrossing", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Zygosity (Heterozygous vs Homozygous) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Zygosity (Heterozygous vs Homozygous)", "url": "/mouse-genetics-glossary/zygosity", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Discover how Humanized Immune Checkpoint (PD-1 / PD-L1 / CTLA-4) supports translational humanized mouse model studies and immunology research.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Humanized Immune Checkpoint (PD-1 / PD-L1 / CTLA-4)", "url": "/mouse-genetics-glossary/humanized-immune-checkpoint", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Cytokine / Receptor Humanization fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Cytokine / Receptor Humanization", "url": "/mouse-genetics-glossary/cytokine-receptor-humanization", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Discover how HLA Humanized Models supports translational humanized mouse model studies and immunology research.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "HLA Humanized Models", "url": "/mouse-genetics-glossary/HLA-humanized-models", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Discover how Single vs Double Humanized Targets supports translational humanized mouse model studies and immunology research.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Single vs Double Humanized Targets", "url": "/mouse-genetics-glossary/single-vs-double-humanized-targets", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Graft-versus-Host / Engraftment Considerations fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Graft-versus-Host / Engraftment Considerations", "url": "/mouse-genetics-glossary/graft-versus-host-engraftment-considerations", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Baseline Phenotyping fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Baseline Phenotyping", "url": "/mouse-genetics-glossary/baseline-phenotyping", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Tissue-Specific Knockout (Examples: Liver, Neuron) is used to engineer and interpret knockout mouse models in preclinical research.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Tissue-Specific Knockout (Examples: Liver, Neuron)", "url": "/mouse-genetics-glossary/tissue-specific-knockout", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Temporal Control (Induction Windows, Dosing) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Temporal Control (Induction Windows, Dosing)", "url": "/mouse-genetics-glossary/temporal-control", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Reporter Readouts (GFP, LacZ, Luciferase) fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Reporter Readouts (GFP, LacZ, Luciferase)", "url": "/mouse-genetics-glossary/reporter-readouts", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft
Learn how Translational Relevance / Disease Modeling fits into advanced mouse model design, validation, and study planning.	[{"@context": "https://schema.org", "@type": "DefinedTerm", "name": "Translational Relevance / Disease Modeling", "url": "/mouse-genetics-glossary/translational-relevance-disease-modeling", "inDefinedTermSet": "https://www.genetargeting.com/glossary"}]	Needs Draft

