

Resource Summary Report

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NOD.Cg-Ighm^{tm1Cgn} H2^{h4} Tg(Foxp3-HBEGF/EGFP)1Doi/HbmMmmh

RRID:MMRRC_037354-MU

Type: Organism

Proper Citation

RRID:MMRRC_037354-MU

Organism Information

URL: https://www.mmrrc.org/catalog/sds.php?mmrrc_id=37354

Proper Citation: RRID:MMRRC_037354-MU

Description: Mus musculus with name NOD.Cg-Ighm^{tm1Cgn} H2^{h4} Tg(Foxp3-HBEGF/EGFP)1Doi/HbmMmmh from MMRRC.

Species: Mus musculus

Notes: Research areas: ; Mutation Type: Targeted Mutation ; Collection: Mullen

Phenotype: decreased bone mineral density [MP:0000063]| abnormal trabecular bone morphology [MP:0000130]| decreased compact bone thickness [MP:0000135]| enlarged heart [MP:0000274]| increased cell proliferation [MP:0000351]| abnormal intestinal epithelium morphology [MP:0000488]| abnormal spleen morphology [MP:0000689]| enlarged lymph nodes [MP:0000702]| abnormal skin condition [MP:0001191]| abnormal cardiovascular system physiology [MP:0001544]| abnormal humoral immune response [MP:0001800]| arrested B cell differentiation [MP:0001802]| decreased IgG level [MP:0001805]| decreased IgM level [MP:0001806]| decreased IgA level [MP:0001807]| thymus hypoplasia [MP:0001823]| abnormal antigen presentation [MP:0001835]| abnormal inflammatory response [MP:0001845]| increased inflammatory response [MP:0001846]| heart inflammation [MP:0001853]| myocarditis [MP:0001856]| kidney inflammation [MP:0001859]| abnormal lymphatic vessel morphology [MP:0001879]| premature death [MP:0002083]| abnormal respiratory system physiology [MP:0002133]| abnormal B cell differentiation [MP:0002144]| abnormal spleen marginal sinus morphology [MP:0002363]| abnormal B lymphocyte antigen presentation [MP:0002453]| decreased immunoglobulin level [MP:0002460]| abnormal immunoglobulin level [MP:0002490]| decreased IgE level [MP:0002492]| tubular nephritis [MP:0002704]| increased urine protein level [MP:0002962]| abnormal cytokine secretion [MP:0003009]| cardiac fibrosis [MP:0003141]| thrombocytopenia [MP:0003179]| small intestinal inflammation [MP:0003306]| increased susceptibility to induced arthritis [MP:0003724]| increased autoantibody level

[MP:0003725]] abnormal compact bone morphology [MP:0003797]] abnormal PR interval [MP:0003901]] insulinitis [MP:0004031]] decreased susceptibility to systemic lupus erythematosus [MP:0004802]] increased susceptibility to autoimmune diabetes [MP:0004803]] decreased susceptibility to autoimmune diabetes [MP:0004804]] decreased spleen weight [MP:0004953]] increased osteoclast cell number [MP:0004984]] increased T cell number [MP:0005015]] decreased B cell number [MP:0005017]] abnormal response to infection [MP:0005025]] increased susceptibility to parasitic infection [MP:0005027]] abnormal T cell proliferation [MP:0005094]] decreased T cell proliferation [MP:0005095]] cachexia [MP:0005150]] decreased susceptibility to injury [MP:0005166]] abnormal pancreatic islet morphology [MP:0005215]] abnormal CD4-positive [MP:0005463]] alpha-beta T cell physiology [MP:0005559]] increased circulating glucose level [MP:0005616]] decreased susceptibility to type IV hypersensitivity reaction [MP:0006387]] abnormal T cell number [MP:0008071]] absent B cells [MP:0008075]] decreased CD4-positive [MP:0008079]] alpha beta T cell number [MP:0008127]] decreased CD8-positive [MP:0008171]] alpha-beta T cell number [MP:0008201]] decreased dendritic cell number [MP:0008211]] abnormal mature B cell morphology [MP:0008212]] absent follicular dendritic cells [MP:0008213]] decreased mature B cell number [MP:0008240]] absent mature B cells [MP:0008241]] absent immature B cells [MP:0008401]] abnormal spleen marginal zone macrophage morphology [MP:0008470]] abnormal metallophilic macrophage morphology [MP:0008495]] abnormal CD8 positive [MP:0009346]] alpha-beta intraepithelial T cell morphology [MP:0010965]] abnormal spleen B cell follicle morphology [MP:0012431]] increased leukocyte cell number [MP:0000218]] increased monocyte cell number [MP:0000220]] extramedullary hematopoiesis [MP:0000240]] increased granulocyte number [MP:0000322]] abnormal spleen morphology [MP:0000689]] enlarged spleen [MP:0000691]] abnormal lymph node size [MP:0000701]] enlarged lymph nodes [MP:0000702]] increased body weight [MP:0001260]] decreased body weight [MP:0001262]] increased metastatic potential [MP:0001272]] abnormal response to new environment [MP:0001413]] altered susceptibility to infection [MP:0001793]] abnormal humoral immune response [MP:0001800]] decreased IgG level [MP:0001805]] decreased IgM level [MP:0001806]] decreased IgA level [MP:0001807]] abnormal inflammatory response [MP:0001845]] increased inflammatory response [MP:0001846]] brain inflammation [MP:0001847]] kidney inflammation [MP:0001859]] liver inflammation [MP:0001860]] lung inflammation [MP:0001861]] stomach inflammation [MP:0001873]] decreased inflammatory response [MP:0001876]] abnormal lactation [MP:0001882]] mammary gland alveolar hyperplasia [MP:0001884]] decreased litter size [MP:0001935]] abnormal lung volume [MP:0001942]] increased airway responsiveness [MP:0001952]] emphysema [MP:0001958]] increased B cell derived lymphoma incidence [MP:0002023]] increased T cell derived lymphoma incidence [MP:0002024]] increased lung adenocarcinoma incidence [MP:0002027]] increased sarcoma incidence [MP:0002032]] increased carcinoma incidence [MP:0002038]] increased pituitary adenoma incidence [MP:0002041]] decreased tumor incidence [MP:0002052]] premature death [MP:0002083]] abnormal spleen size [MP:0002224]] abnormal pulmonary alveolus morphology [MP:0002270]] decreased airway responsiveness [MP:0002335]] abnormal lymph node cortex morphology [MP:0002343]] abnormal lymph node primary follicle morphology [MP:0002345]] abnormal lymph node secondary follicle morphology [MP:0002346]] abnormal spleen red pulp morphology [MP:0002356]] abnormal spleen white pulp morphology [MP:0002357]] abnormal dendritic cell physiology [MP:0002376]] increased susceptibility to bacterial infection [MP:0002412]] increased susceptibility to viral infection [MP:0002418]] abnormal adaptive immunity [MP:0002420]] altered susceptibility to autoimmune disorder [MP:0002425]] abnormal macrophage physiology [MP:0002451]]

abnormal dendritic cell antigen presentation [MP:0002455] abnormal B cell physiology [MP:0002459] decreased immunoglobulin level [MP:0002460] increased immunoglobulin level [MP:0002461] abnormal immunoglobulin level [MP:0002490] decreased IgE level [MP:0002492] increased IgE level [MP:0002497] abnormal type IV hypersensitivity reaction [MP:0002534] glomerulonephritis [MP:0002743] decreased vertical activity [MP:0002757] albuminuria [MP:0002871] increased circulating alanine transaminase level [MP:0002941] abnormal cytokine secretion [MP:0003009] abnormal redox activity [MP:0003186] small intestinal inflammation [MP:0003306] abnormal tumor morphology [MP:0003448] increased fear-related response [MP:0003459] abnormal pancreatic beta cell physiology [MP:0003562] increased ovarian carcinoma incidence [MP:0003579] increased autoantibody level [MP:0003725] decreased autoantibody level [MP:0003726] abnormal nitric oxide homeostasis [MP:0003957] abnormal lung vasculature morphology [MP:0004007] abnormal maternal decidual layer morphology [MP:0004256] decreased length of allograft survival [MP:0004752] decreased anti-nuclear antigen antibody level [MP:0004795] decreased anti-double stranded DNA antibody level [MP:0004798] increased susceptibility to experimental autoimmune encephalomyelitis [MP:0004799] decreased susceptibility to systemic lupus erythematosus [MP:0004802] decreased susceptibility to autoimmune diabetes [MP:0004804] abnormal immune tolerance [MP:0005000] increased eosinophil cell number [MP:0005011] increased lymphocyte cell number [MP:0005013] increased T cell number [MP:0005015] abnormal response to infection [MP:0005025] decreased susceptibility to parasitic infection [MP:0005026] increased susceptibility to parasitic infection [MP:0005027] abnormal MHC II cell surface expression on macrophages [MP:0005040] impaired natural killer cell mediated cytotoxicity [MP:0005070] abnormal cytotoxic T cell physiology [MP:0005078] decreased double-negative T cell number [MP:0005089] cachexia [MP:0005150] abnormal response to injury [MP:0005164] decreased susceptibility to injury [MP:0005166] abnormal renal glomerulus morphology [MP:0005325] atherosclerotic lesions [MP:0005338] decreased susceptibility to autoimmune disorder [MP:0005351] abnormal Langerhans cell physiology [MP:0005362] increased susceptibility to fungal infection [MP:0005399] abnormal skin physiology [MP:0005501] corneal vascularization [MP:0005542] decreased circulating creatinine level [MP:0005554] increased blood urea nitrogen level [MP:0005565] decreased susceptibility to type IV hypersensitivity reaction [MP:0005616] increased susceptibility to type IV hypersensitivity reaction [MP:0005617] abnormal response to transplant [MP:0005671] abnormal mammary gland growth during pregnancy [MP:0006269] increased NK T cell number [MP:0008039] abnormal uterine NK cell morphology [MP:0008054] increased CD4-positive [MP:0008074] alpha beta T cell number [MP:0008078] increased CD8-positive [MP:0008135] alpha-beta T cell number [MP:0008466] small Peyer's patches [MP:0008474] enlarged mesenteric lymph nodes [MP:0008496] absent spleen germinal center [MP:0008497] decreased IgG2a level [MP:0008498] decreased IgG2b level [MP:0008499] decreased IgG3 level [MP:0008523] increased IgG1 level [MP:0008567] absent lymph node germinal center [MP:0008596] decreased interferon-gamma secretion [MP:0008660] increased circulating interleukin-6 level [MP:0008661] increased interleukin-10 secretion [MP:0008663] decreased interleukin-10 secretion [MP:0008681] increased interleukin-12 secretion [MP:0008687] increased interleukin-17 secretion [MP:0008699] increased interleukin-2 secretion [MP:0008702] increased interleukin-4 secretion [MP:0008713] increased interleukin-5 secretion [MP:0008770] abnormal cytokine level [MP:0008828] decreased survivor rate [MP:0008874] abnormal lymph node cell ratio [MP:0009099] decreased physiological sensitivity to xenobiotic [MP:0009246] abnormal uterine NK cell physiology [MP:0009336] pale spleen [MP:0009394] increased splenocyte proliferation [MP:0009419] increased

uterine NK cell number [MP:0009643] skeletal muscle fibrosis [MP:0009763] abnormal urine homeostasis [MP:0009766] increased sensitivity to induced morbidity/mortality [MP:0009788] increased sensitivity to xenobiotic induced morbidity/mortality [MP:0009791] increased susceptibility to bacterial infection induced morbidity/mortality [MP:0009828] increased susceptibility to viral infection induced morbidity/mortality [MP:0010210] increased tumor latency [MP:0010308] abnormal circulating cytokine level [MP:0010574] decreased tumor latency [MP:0010639] aorta dilation [MP:0010659] altered tumor pathology [MP:0010740] abdominal aorta aneurysm [MP:0010750] abnormal dendritic cell chemotaxis [MP:0010751] increased susceptibility to parasitic infection induced morbidity/mortality [MP:0010760] decreased susceptibility to parasitic infection induced morbidity/mortality [MP:0010766] abnormal macrophage chemotaxis [MP:0011086] abnormal NK cell physiology [MP:0011320] postnatal lethality [MP:0011427] incomplete penetrance [MP:0012431] abnormal glomerular capillary morphology [MP:0013239] mesangial cell hyperplasia [MP:0013590] increased lymphoma incidence [MP:0030466] abnormal cytokine secretion [MP:0003009] thyroid inflammation [MP:0003504] insulinitis [MP:0004031] decreased susceptibility to autoimmune diabetes [MP:0004804] periinsulinitis [MP:0005580] decreased physiological sensitivity to xenobiotic [MP:0008874]

Affected Gene: Ifng||EGFP||HBEGF|Foxp3||Ighm||

Catalog Number: 037354-MU

Background: Targeted Mutation

Database: Mutant Mouse Resource and Research Center (MMRRC)

Database Abbreviation: MMRRC

Alternate IDs: MMRRC_37354-MU, MMRRC_037354, MMRRC_37354

Organism Name: NOD.Cg-Ighm^{tm1Cgn} H2^{h4} Tg(Foxp3-HBEGF/EGFP)1Doi/HbmMmmh

Record Creation Time: 20230308T055150+0000

Record Last Update: 20260815T124845+0000

Ratings and Alerts

No rating or validation information has been found for NOD.Cg-Ighm^{tm1Cgn} H2^{h4} Tg(Foxp3-HBEGF/EGFP)1Doi/HbmMmmh.

Warning: Warning. Researchers have noted that this genotype does not sufficiently model human rheumatoid arthritis.

Warning: Warning. Researchers have noted that this genotype does not sufficiently model human systemic lupus erythematosus.

Warning: Warning. Researchers have noted that this genotype does not sufficiently model human type 1 diabetes mellitus.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: Mutant Mouse Resource and Research Center (MMRRC)

Usage and Citation Metrics

We have not found any literature mentions for this resource.