

Resource Summary Report

Generated by [NIF](#) on Aug 29, 2026

UD Chick EST Project

RRID:SCR_002236

Type: Tool

Proper Citation

UD Chick EST Project (RRID:SCR_002236)

Resource Information

URL: <http://www.chickest.udel.edu/>

Proper Citation: UD Chick EST Project (RRID:SCR_002236)

Description: THIS RESOURCE IS NO LONGER IN SERVICE. Documented on October 28, 2025. A chicken EST Web site has been created to provide access to the data, and a set of unique sequences has been deposited with GenBank. This site contains over 40,000 EST sequences from the chicken cDNA libraries in the University of Delaware collection. Users can perform keyword searches, BLAST nucleotide sequences against our database, view clusters of similar or overlapping clones, and order clones. The cDNA and gene sequences of many mammalian cytokines and their receptors are known. However, corresponding information on avian cytokines is limited due to the lack of cross-species activity at the functional level or strong homology at the molecular level. To improve the efficiency of identifying cytokines and novel chicken genes, a directionally cloned cDNA library from T-cell-enriched activated chicken splenocytes was constructed, and the partial sequence of 5251 clones was obtained. Sequence clustering indicates that 2357 (42%) of the clones are present as a single copy, and 2961 are distinct clones, demonstrating the high level of complexity of this library. Comparisons of the sequence data with known DNA sequences in GenBank indicate that approximately 25% of the clones match known chicken genes, 39% have similarity to known genes in other species, and 11% had no match to any sequence in the database. Several previously uncharacterized chicken cytokines and their receptors were present in our library. This collection provides a useful database for cataloging genes expressed in T cells and a valuable resource for future investigations of gene expression in avian immunology. Therefore, the Chick EST database was created.

Synonyms: U.D. Chick EST Database, University of Delaware Chick EST Project, University of Delaware Chick EST Database

Resource Type: biomaterial supply resource, cell repository, material resource

Defining Citation: [PMID:16554550](#)

Keywords: gene, avian, cdna, chicken, clone, cytokine, dna, homology, immunology, mammalian, molecular, nucleotide, poultry, receptor, sequence, splenocyte, t cell

Availability: THIS RESOURCE IS NO LONGER IN SERVICE

Resource Name: UD Chick EST Project

Resource ID: SCR_002236

Alternate IDs: nif-0000-20971

Record Creation Time: 20220129T080212+0000

Record Last Update: 20260821T042539+0000

Ratings and Alerts

No rating or validation information has been found for UD Chick EST Project.

No alerts have been found for UD Chick EST Project.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 18 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#).

Antin PB, et al. (2010) Embryonic expression of the chicken Krüppel-like (KLF) transcription factor gene family. Developmental dynamics : an official publication of the American Association of Anatomists, 239(6), 1879.

Sato K, et al. (2008) Molecular characterization and expression of angiopoietin-like protein 3 in the chicken, Gallus gallus. General and comparative endocrinology, 158(1), 102.

Bellingham J, et al. (2006) Evolution of melanopsin photoreceptors: discovery and characterization of a new melanopsin in nonmammalian vertebrates. PLoS biology, 4(8), e254.

Seol HS, et al. (2006) Changes in gene expression involved in energy utilization during chicken follicle development. Animal reproduction science, 95(3-4), 283.

Hawkins RD, et al. (2006) Applying genomics to the avian inner ear: development of subtractive cDNA resources for exploring sensory function and hair cell regeneration. Genomics, 87(6), 801.

Niemiec PK, et al. (2006) Synthesis of chicken major histocompatibility complex class II oligomers using a baculovirus expression system. Protein expression and purification,

46(2), 390.

Kawashima T, et al. (2005) Characterization and expression analysis of the chicken interleukin-11 receptor alpha chain. *Developmental and comparative immunology*, 29(4), 349.

Fadiel A, et al. (2005) Farm animal genomics and informatics: an update. *Nucleic acids research*, 33(19), 6308.

Bollerot K, et al. (2005) Core binding factor in the early avian embryo: cloning of Cbfbeta and combinatorial expression patterns with Runx1. *Gene expression patterns : GEP*, 6(1), 29.

Min W, et al. (2004) Identification and characterization of chicken interleukin-16 cDNA. *Developmental and comparative immunology*, 28(2), 153.

Bennett CS, et al. (2004) Characterization of the human secreted phosphoprotein 24 gene (SPP2) and comparison of the protein sequence in nine species. *Matrix biology : journal of the International Society for Matrix Biology*, 22(8), 641.

Nemere I, et al. (2004) Identification and characterization of 1,25D3-membrane-associated rapid response, steroid (1,25D3-MARRS) binding protein. *The Journal of steroid biochemistry and molecular biology*, 89-90(1-5), 281.

Ganesh S, et al. (2004) The carbohydrate-binding domain of Lafora disease protein targets Lafora polyglucosan bodies. *Biochemical and biophysical research communications*, 313(4), 1101.

Zuzarte-Luís V, et al. (2004) A new role for BMP5 during limb development acting through the synergic activation of Smad and MAPK pathways. *Developmental biology*, 272(1), 39.

Seki Y, et al. (2003) Broiler chickens (Ross strain) lack insulin-responsive glucose transporter GLUT4 and have GLUT8 cDNA. *General and comparative endocrinology*, 133(1), 80.

Bridgham JT, et al. (2003) Characterization of chicken TNFR superfamily decoy receptors, DcR3 and osteoprotegerin. *Biochemical and biophysical research communications*, 307(4), 956.

Minko K, et al. (2003) From mesoderm to blood islands: patterns of key molecules during yolk sac erythropoiesis. *Gene expression patterns : GEP*, 3(3), 261.

Tirunagaru VG, et al. (2000) An expressed sequence tag database of T-cell-enriched activated chicken splenocytes: sequence analysis of 5251 clones. *Genomics*, 66(2), 144.