

Resource Summary Report

Generated by RRID on Aug 5, 2026

Thermo Fisher: Applied Biosystems: QuantStudio 12K Flex RealTime PCR System

RRID:SCR_021098

Type: Tool

Proper Citation

Thermo Fisher: Applied Biosystems: QuantStudio 12K Flex RealTime PCR System (RRID:SCR_021098)

Resource Information

URL: <https://www.thermofisher.com/us/en/home/life-science/pcr/real-time-pcr/real-time-pcr-instruments/quantstudio-systems/models/quantstudio-12-flex.html>

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Description: System can simultaneously run up to four 3072 reaction QuantStudio 12K Flex OpenArray plates in about four hours. When combined with the QuantStudio 12K Flex OpenArray AccuFill System, can produce up to 110000 data points or more in 8 hour day. Has touch screen interface and comprehensive software analysis tools for gene expression, genotyping, and digital PCR increase productivity. Has five interchangeable block formats including: OpenArray plate, TaqMan Array card, 384-well, and 96-well (0.1 and 0.2 mL).

Synonyms: QuantStudio?12K Flex Real-Time PCR System

Resource Type: instrument resource

Keywords: Real Time PCR System, QuantStudio 12K Flex OpenArray, instrument, equipment, USEdit

Availability: Commercially available

Resource Name: Thermo Fisher: Applied Biosystems: QuantStudio 12K Flex RealTime PCR System

Resource ID: SCR_021098

Record Creation Time: 20220129T080353+0000

Record Last Update: 20260801T190705+0000

Ratings and Alerts

No rating or validation information has been found for Thermo Fisher: Applied Biosystems: QuantStudio 12K Flex RealTime PCR System.

No alerts have been found for Thermo Fisher: Applied Biosystems: QuantStudio 12K Flex RealTime PCR System.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 14 mentions in open access literature.

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

Subrahmanian SM, et al. (2025) Deletion of the stress response protein REDD1 prevents sodium iodate-induced RPE damage and photoreceptor loss. *GeroScience*, 47(2), 1789.

Sunilkumar S, et al. (2025) REDD1 expression in podocytes facilitates renal inflammation and pyroptosis in streptozotocin-induced diabetic nephropathy. *Cell death & disease*, 16(1), 79.

Sunilkumar S, et al. (2025) Podocyte-Specific Expression of the Stress Response Protein REDD1 Is Necessary for Diabetes-Induced Podocytopenia. *Diabetes*, 74(3), 398.

Rasicci DV, et al. (2025) Early-Stage Alcoholic Cardiomyopathy Highlighted by Metabolic Remodeling, Oxidative Stress, and Cardiac Myosin Dysfunction in Male Rats. *International journal of molecular sciences*, 26(14).

McCurry CM, et al. (2024) NLRP3 Inflammasome Priming in the Retina of Diabetic Mice Requires REDD1-Dependent Activation of GSK3?. *Investigative ophthalmology & visual science*, 65(3), 34.

Stevens SA, et al. (2024) REDD1 Deletion Suppresses NF- κ B Signaling in Cardiomyocytes and Prevents Deficits in Cardiac Function in Diabetic Mice. *International journal of molecular sciences*, 25(12).

Stevens SA, et al. (2023) PERK/ATF4-dependent expression of the stress response protein REDD1 promotes proinflammatory cytokine expression in the heart of obese mice. *American journal of physiology. Endocrinology and metabolism*, 324(1), E62.

Sunilkumar S, et al. (2023) REDD1-dependent GSK3 β dephosphorylation promotes NF- κ B activation and macrophage infiltration in the retina of diabetic mice. *The Journal of biological chemistry*, 299(8), 104991.

Sunilkumar S, et al. (2022) REDD1 Ablation Attenuates the Development of Renal Complications in Diabetic Mice. *Diabetes*, 71(11), 2412.

van der Vlist M, et al. (2022) Macrophages transfer mitochondria to sensory neurons to resolve inflammatory pain. *Neuron*, 110(4), 613.

Nemir M, et al. (2022) Inhibition of the NOTCH1 Pathway in the Stressed Heart Limits Fibrosis and Promotes Recruitment of Non-Myocyte Cells into the Cardiomyocyte Fate. *Journal of cardiovascular development and disease*, 9(4).

Sandau US, et al. (2022) Differential Effects of APOE Genotype on MicroRNA Cargo of Cerebrospinal Fluid Extracellular Vesicles in Females With Alzheimer's Disease Compared to Males. *Frontiers in cell and developmental biology*, 10, 864022.

Sunilkumar S, et al. (2022) Stress response protein REDD1 promotes diabetes-induced retinal inflammation by sustaining canonical NF- κ B signaling. *The Journal of biological chemistry*, 298(12), 102638.

Wookey P, et al. (2021) Methods to measure calcitonin receptor activity, up-regulated in cell stress, apoptosis and autophagy. *F1000Research*, 10, 1019.