

Biotechnology & Life Sciences



The biotechnology field presents some of the most complicated challenges in intellectual property.

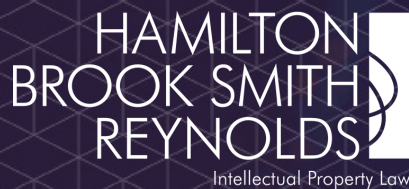
One reason for this complexity is the rapid development of scientific disciplines, such as molecular, cell, synthetic, and developmental biology, as well as microbiology, immunology, bioinformatics, nanoscience, biochemistry, embryology, and genetics. All of these disciplines produce novel subject matter which needs to be protected. In addition, these disciplines involve rapidly evolving laws that affect patenting.

Our firm's practice includes experience in the following areas of biotechnology and life sciences:

- Gene expression and gene chips
- Gene therapy, signal transduction, and gene activation
- Genetic diagnostics
- Immunology and antibody technologies, as well as their application in fields such as neurobiology, immunology, microbiology (including vaccines and therapeutics), biodefense, tissue regeneration and transplantation, and pluripotent stem cell isolation and differentiation
- Metabolomics
- Novel biofuels and methods of biofuel production
- Pharmaceuticals and drug development (drug delivery, drug discovery)
- RNA (including siRNA, antisense, and microRNAs)
- Small molecules, synthetic polymers, and proteins
- Therapeutics and diagnostics for cancer, neurodegenerative and metabolic disorders, antibody technologies, new medical uses and formulations of known compounds, and nucleic acid sequencing and detection/labeling technologies, including immunofluorescence

Our attorneys have strong scientific backgrounds. Many have advanced degrees in biology, as well as molecular and cellular biology, and cell and developmental biology, biochemistry, as well as epidemiology and biostatistics, biophysics, physiology, and medicinal, organic, and biological and computational chemistry. Several of our attorneys also have done research at both small and large pharmaceutical and biotech companies.

In view of the Supreme Court decisions in *Association for Molecular Pathology v. Myriad Genetics, Inc.* and *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, which set more stringent guidelines for subject matter to be eligible for patent protection, patentees need to devise new strategies for protecting their biological inventions. Our attorneys have the scientific and legal expertise to overcome the hurdles that Myriad and Mayo present.



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Hamilton Brook Smith Reynolds helps clients with whole life cycle management because we have worked with inventions ranging from benchmark discoveries to billion-dollar drugs. From basic discoveries to patent estates, such as starting with one gene and then finding and identifying multiple uses, we can help you develop and manage your patent portfolio. We have also conducted due diligence for companies looking to acquire or invest in companies.