

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
January 9, 2017**

**ORDER GRANTING CONFIDENTIAL TREATMENT
UNDER THE SECURITIES ACT OF 1933**

Signal Genetics, Inc.

File No. 333-214893 - CF#34524

Signal Genetics, Inc. submitted an application under Rule 406 requesting confidential treatment for information it excluded from the Exhibits to a Form S-4 filed December 2, 2016, as amended on January 4, 2017.

Based on representations by Signal Genetics, Inc., that this information qualifies as confidential commercial or financial information under the Freedom of Information Act, 5 U.S.C. 552(b)(4), the Division of Corporation Finance has determined not to publicly disclose it. Accordingly, excluded information from the following exhibits will not be released to the public for the time periods specified:

| | |
|-----------------|--------------------------|
| Exhibit 10.41 | through December 2, 2026 |
| Exhibit 10.42 | through December 2, 2026 |
| Exhibit 10.43 | through December 2, 2026 |
| Exhibit 10.44 | through December 2, 2026 |
| Exhibit 10.45 | through December 2, 2026 |
| Exhibit 10.45.1 | through December 2, 2026 |
| Exhibit 10.45.2 | through December 2, 2026 |
| Exhibit 10.45.3 | through December 2, 2026 |
| Exhibit 10.46 | through December 2, 2026 |
| Exhibit 10.51 | through December 2, 2026 |

For the Commission, by the Division of Corporation Finance, pursuant to delegated authority:

Brent J. Fields
Secretary