

HLA alleles detectable by the HLA-A3101 RealFast™ Assay

HLA-A3101 RealFast™ Assay (REF 7-640 / 7-643) is designed to be capable of detecting known HLA-A*31:01 alleles and subtypes.

According to the IPD-IMGT/HLA Database^{*)}, our in-silico analysis revealed that the detection of other HLA-A*31 alleles is widely excluded by prevention of amplification and/or abrogated probe binding. Nevertheless, the detection of some rare non-HLA-A*31:01 alleles cannot be excluded due to sequence homologies.

Allele frequencies are available at Allele Frequency Net Database: www.allelefrequencies.net

| HLA A*31:01 alleles | Proven or supposed detection by REF 7-640 | Association with Carbamazepine hypersensitivity |
|--------------------------|---|---|
| A*31:01:02 to A*31:01:46 | ✓ | ✓ |
| A*31:01:47 | X | ✓ |
| A*31:01:48 | ✓ | ✓ |

Possible cross-reactivity of non-HLA-A*31:01 alleles based on in-silico analysis

A*31:03, A*31:04:01:01, A*31:04:01:02, A*31:04:02, A*31:05, A*31:06, A*31:09, A*31:11, A*31:12 to A*31:16, A*31:18 to A*31:30, A*31:32, A*31:34 to A*31:41, A*31:43, A*31:45 to A*31:56, A*31:58 to A*31:65, A*31:67 to A*31:74, A*31:76 to A*31:78, A*31:80 to A*31:86, A*31:88, A*31:90, A*31:92 to A*31:99, A*31:101 to A*31:103, A*31:105 to A*31:108, A*31:110 to A*31:114, A*31:116 to A*31:130, A*31:132 to A*31:144, A*31:146 to A*31:211

^{*)} IPD-IMGT/HLA Database (www.ebi.ac.uk/ipd/imgt/hla): release 3.47.0 (2022-01)