



- (51) **International Patent Classification:**  
*C12Q 1/68* (2006.01)
- (21) **International Application Number:**  
PCT/US2013/027441
- (22) **International Filing Date:**  
22 February 2013 (22.02.2013)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**  
61/604,290 28 February 2012 (28.02.2012) US
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- (81) **Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report (Art. 21(3))
- with sequence listing part of description (Rule 5.2(a))

(54) **Title:** CANCER PATIENT SELECTION FOR ADMINISTRATION OF WNT SIGNALING INHIBITORS USING RNF43 MUTATION STATUS

(57) **Abstract:** Disclosed are biomarkers, methods and assay for the identification of cancer patients who are predicted to benefit from the therapeutic administration of Wnt antagonist. The biomarkers include detection of RNF43 and ZNRF3 gene deletion, reduced RNF43 and ZNRF3 mRNA expression, reduced RNF43 and ZNRF3 protein expression, RNF43 and ZNRF3 inactivation mutation, phosphorylated LRP6, phosphorylated Dishevelleds, and the expression of Frizzleds. These biomarkers can be associated with the better outcome for cancer patients treated with Wnt pathway inhibitors.

