**Supplementary table 3.**

Summary of the most important and Crohn’s disease related pathways described for each microRNA.

|  |  |  |
| --- | --- | --- |
| **microRNA** | **Function** | **References** |
| miR-15b-5p | Inflammatory mediator of the NF-κB/XIAP axis of activated B cells in colon cancer cells. | 35 |
|  | Restrains apoptosis by downregulating Bax, cleaving caspase-3, and upregulating Bcl-2. | 36 |
|  | Represses induced oxidative stress by reducing MDA and NOX4 expression and enhancing activities of SOD and CAT. | 36 |
|  | Can downregulate PTPN4 to lead to metastasis. | 60 |
| miR-451 | Represses colorectal cancer by inhibiting tumor growth and IL6R expression | 39 |
|  | Modulates the PI3K/AKT/mTOR signaling pathway | 40 |
|  | Dysregulated in primary colorectal tumors and in patients' sera | 44 |
| miR-106b-5p | inhibits the block of TNF-α-induced activation of caspase-3 | 41 |
|  | Promotes an immune imbalance towards Th17 response and decreases Treg | 42 |
|  | Regulates RUNX3 | 61 |
| miR-191 | Represses SATB1 to modulate the Wnt pathway | 48, 62 |
|  | Targets EGR1 and activates the PI3K/AKT signaling pathway | 63 |
| miR-125b-5p | Decreases CD4+ T-cell differentiation by targeting IFNγ, IL-2, and IL-10, inhibits B-cell activation and promotes macrophage activation.Induces apoptosis or proliferation through the modulation of p53 expression | 44 |
| miR-423-5p | Associated with IBD and with colorectal carcinoma (CRC) | 45 |
|  | Implicated in the IL-21/claudin-5 signal pathway and intestinal barrier function | 64 |
| miR-93-5p | Blocks the TGFβ signaling pathway | 46 |
|  | Implicated in PD-L1/PD-1 immune checkpoint and IFNγ levels | 65 |