

Cytoscape Custermized Network

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★ 주의

Cytoscape 3.6.0 version 이상 설치 (3.7.0 권장)
JAVA8 64bit 설치

<http://www.cytoscape.org/>



<https://github.com/cytoscape/cytoscape/releases/3.7.0/>



<http://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html> *회원가입/로그인필요

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JRE 8u121 Checksum

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Linux x86	56.92 MB	jre-8u121-linux-i586.rpm
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Linux x64	70.26 MB	jre-8u121-linux-x64.tar.gz
Mac OS X	62.28 MB	jre-8u121-macosx-x64.dmg
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Solaris SPARC 64-bit	52.05 MB	jre-8u121-solaris-sparcv9.tar.gz
Solaris x64	49.9 MB	jre-8u121-solaris-x64.tar.gz
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Windows x86 Offline (32bit)	53.81 MB	jre-8u121-windows-i586.exe
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Windows x64 Offline (64bit)	61.18 MB	jre-8u121-windows-x64.exe
Windows x64	62.66 MB	jre-8u121-windows-x64.tar.gz

Input 파일 만들기

(1) Sif파일 miRNA-KEGG Network input.sif

엑셀파일로 가져와 열 수 있고 수정하고 저장하여 이용한다.
A와 C열에 interaction 정보를 입력하고 B열은 interacts with로 통일한다.

EX) “사과-포도”를 연결하고 싶다면 A열에 사과! C열에 포도!

	A	B	C
1	Lysine degradation	interacts with	hsa-miR-574-5p
2	Lysine degradation	interacts with	hsa-miR-150-5p
3	Lysine degradation	interacts with	hsa-miR-1290
4	Hippo signaling pathway	interacts with	hsa-miR-574-5p
5	Hippo signaling pathway	interacts with	hsa-miR-150-5p
6	Hippo signaling pathway	interacts with	hsa-miR-1290
7	Base excision repair	interacts with	hsa-miR-574-5p
8	Base excision repair	interacts with	hsa-miR-150-5p
9	TGF-beta signaling pathway	interacts with	hsa-miR-574-5p
10	TGF-beta signaling pathway	interacts with	hsa-miR-150-5p
11	TGF-beta signaling pathway	interacts with	hsa-miR-1290
12	Adherens junction	interacts with	hsa-miR-574-5p
13	Adherens junction	interacts with	hsa-miR-150-5p

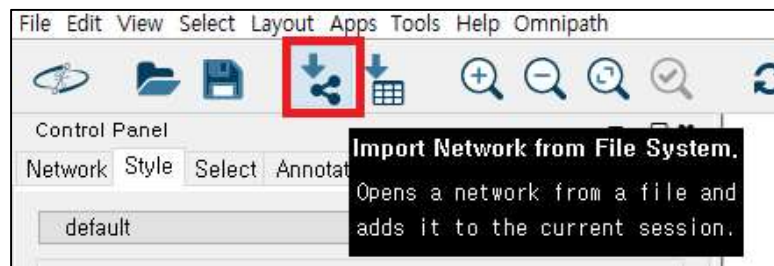
Input 파일 만들기

(2) Txt파일 miRNA-KEGG Network input

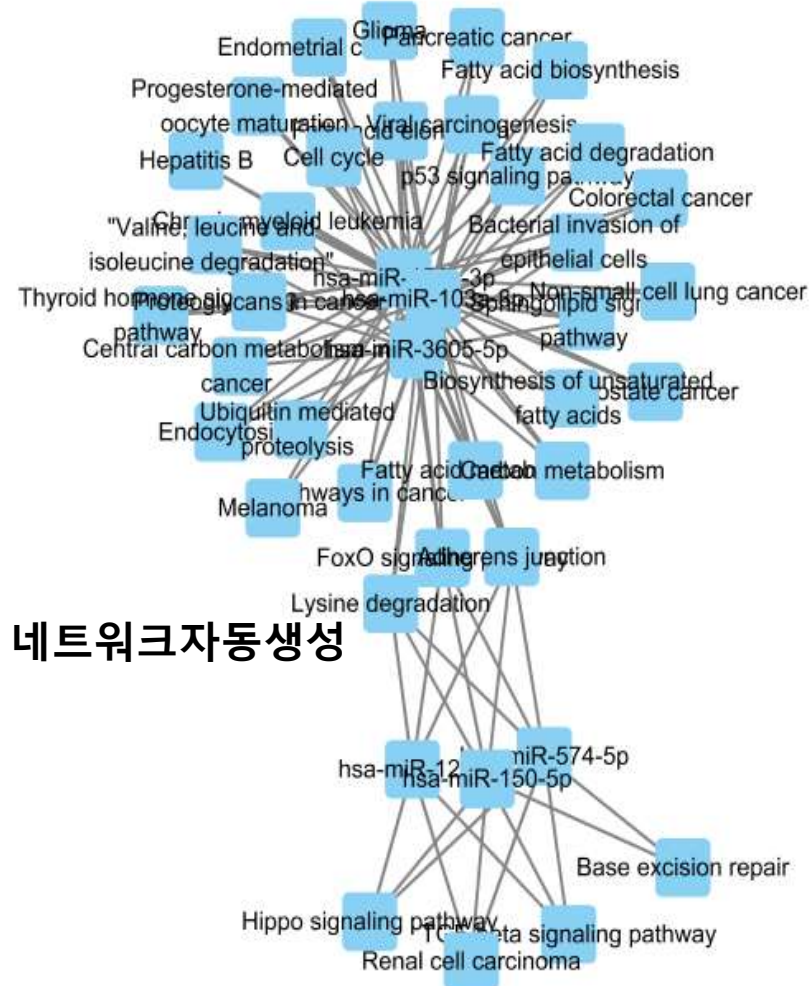
엑셀파일로 가져와 열 수 있고 수정하고 저장하여 이용한다.
각 해당 node에 대한 Fold change(log2), Type 등 분류하고자 하는 정보를 입력한다.

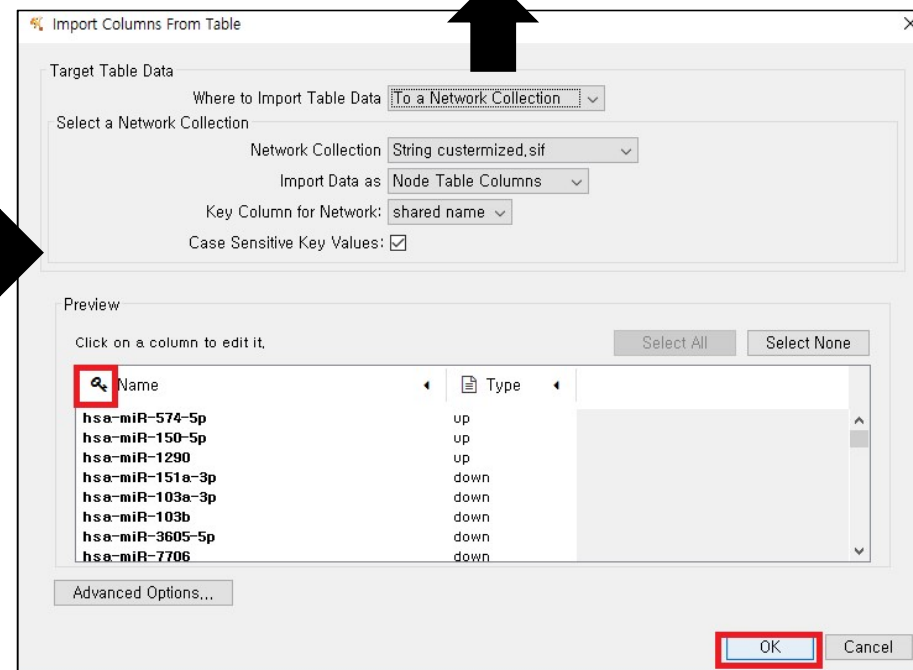
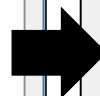
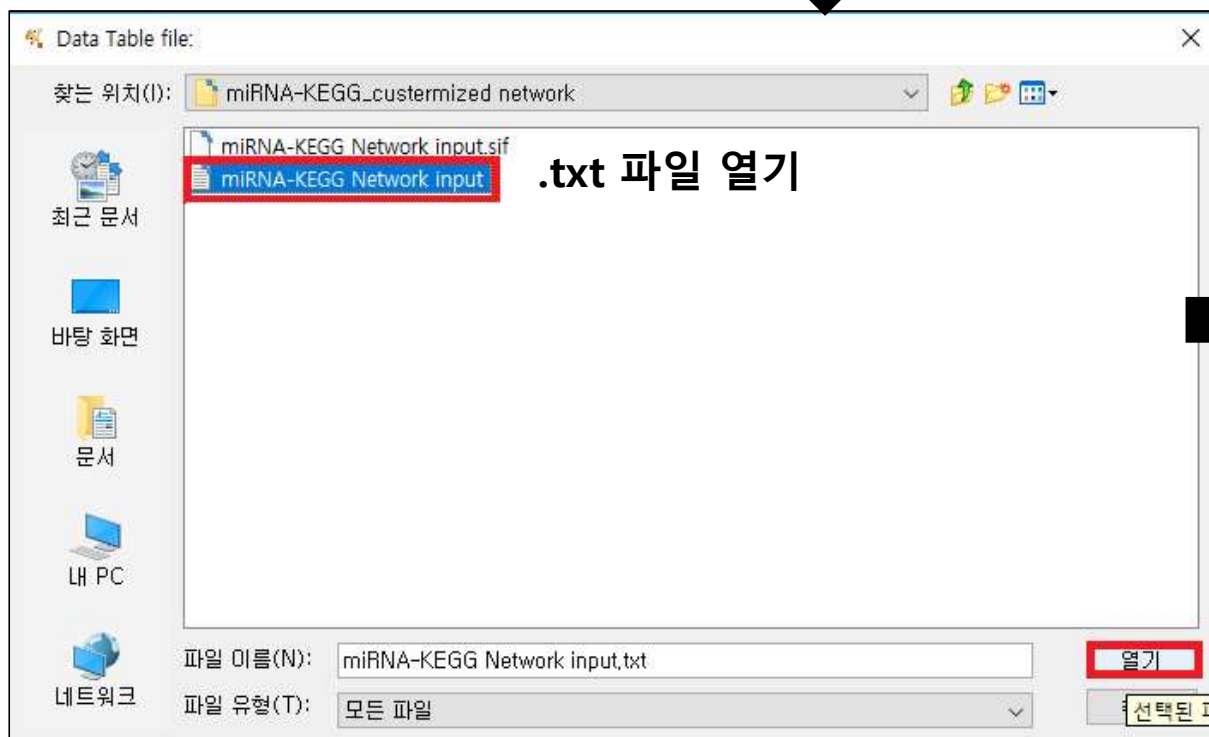
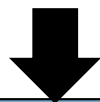
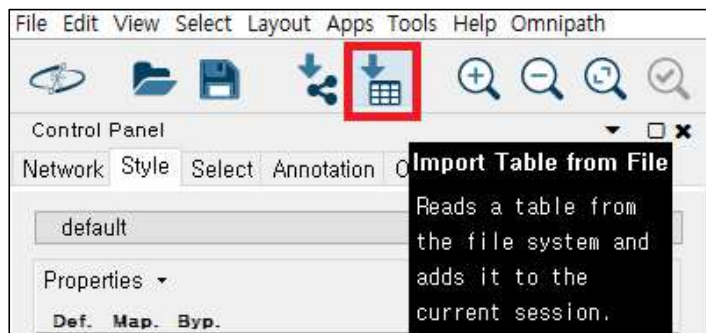
* 카테고리의 분류는 만들고자 하는 네트워크에 따라 자유롭게 구성할 수 있다.

	A	B
1	Name	Type
2	hsa-miR-574-5p	up
3	hsa-miR-150-5p	up
4	hsa-miR-1290	up
5	hsa-miR-151a-3p	down
6	hsa-miR-103a-3p	down
7	hsa-miR-103b	down
8	hsa-miR-3605-5p	down
9	hsa-miR-7706	down
10	Lysine degradation	KEGG
11	Hippo signaling pathway	KEGG
12	Base excision repair	KEGG
13	TGF-beta signaling pathway	KEGG
14	Adherens junction	KEGG
15	Renal cell carcinoma	KEGG

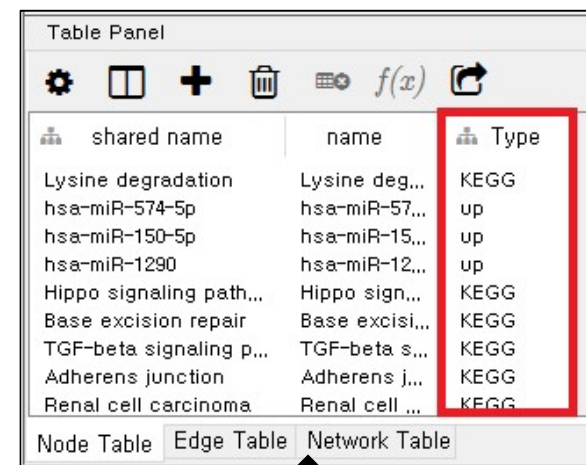


네트워크자동생성

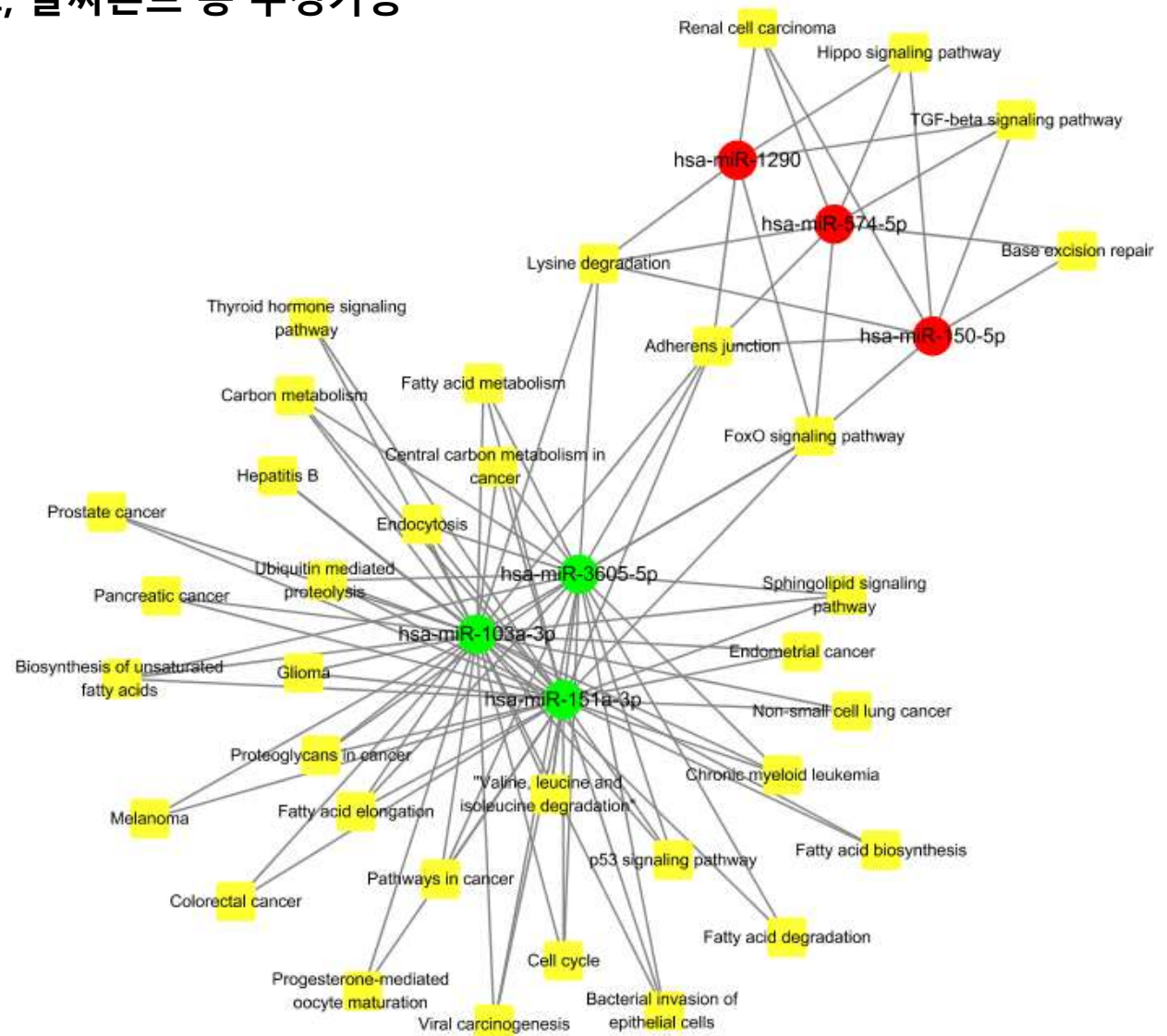
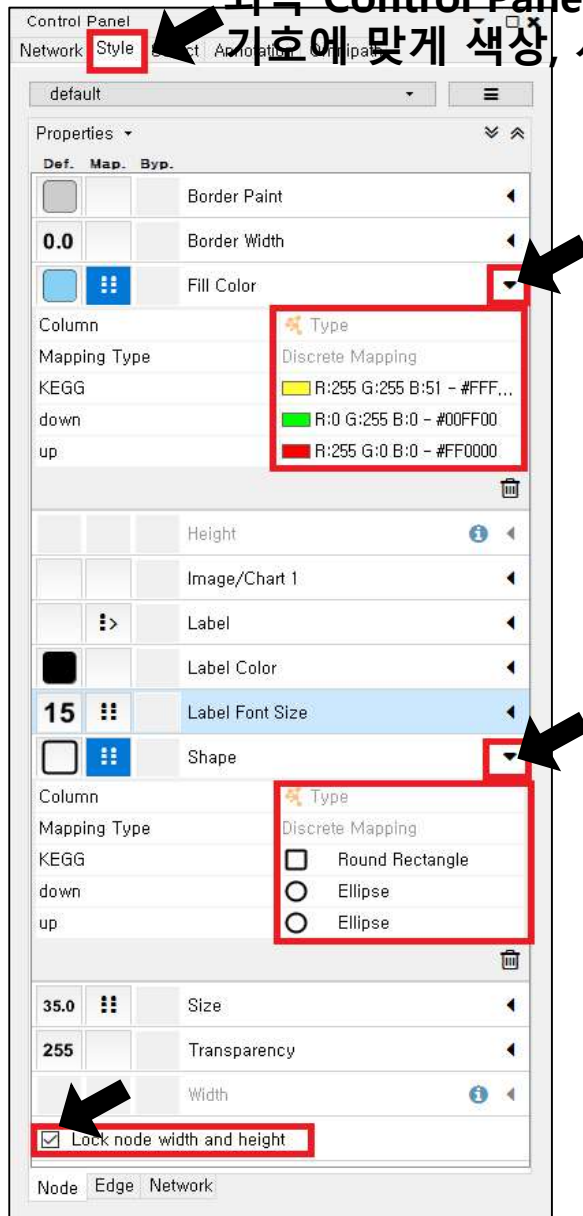




하단의 Table Panel에 카테고리 생성확인

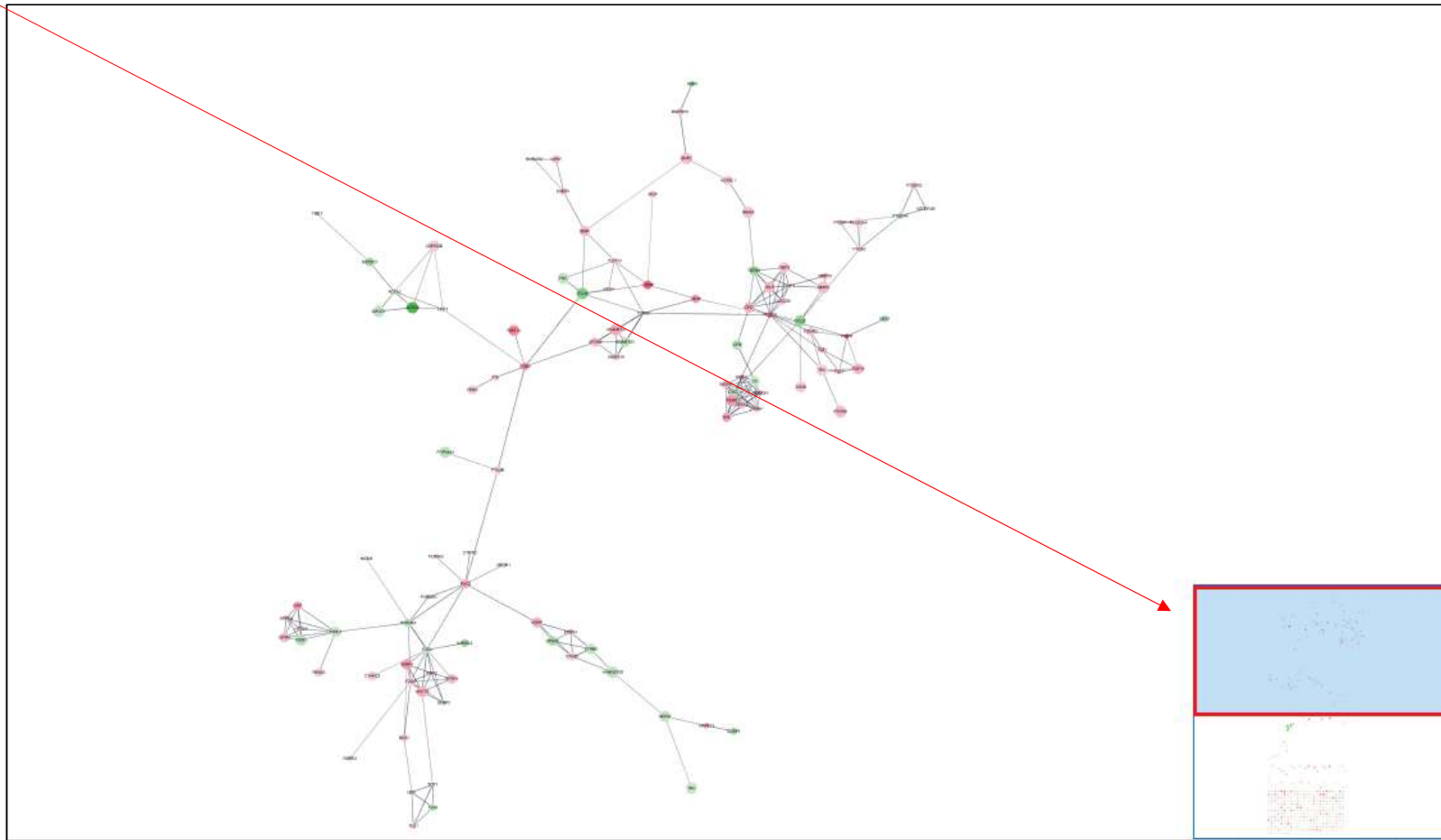


좌측 Control Panel의 Style에서
기호에 맞게 색상, 사이즈, 글씨폰트 등 수정가능



★ 이미지저장방법

1. 저장 하고자 하는 이미지 영역을 확대/축소를 통해 맞춰준다.
(오른쪽 아래 네비게이션 창에서 파란색 영역이 저장되는 이미지의 영역이다.)



★ 이미지저장방법

1. [File] > [Export]> [Network to Image]
2. PDF 파일형식으로 저장하는 것을 권장한다. (확대를 하여도 이미지가 깨지지 않음.)
3. 저장위치와 파일명을 지정하여 저장한다.

