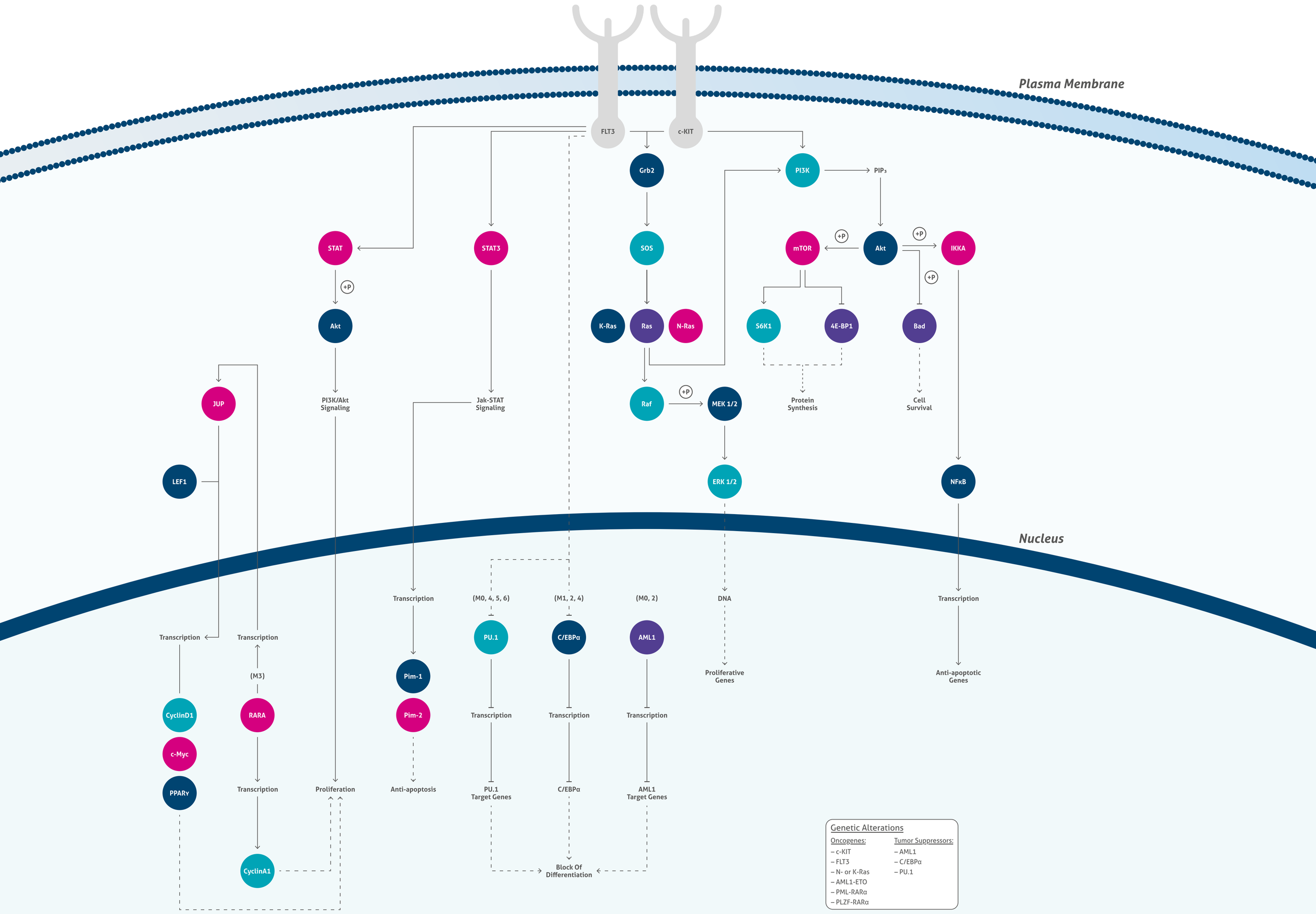

Genetic Alterations

Oncogenes:	Tumor Suppressors:
– c-KIT	– AML1
– FLT3	– C/EBPα
– N- or K-Ras	– PU.1
– AML1-ETO	
– PML-RARα	
– PLZF-RARα	

AML SIGNALING PATHWAY

Acute myeloid leukemia is the most common manifestation of leukemia in adults. Clinically, it can be subdivided into nine different morphological classes (see right). Whatever the class, all forms of AML are characterized by overgrowth of white blood cells in the bone marrow. Like many other cancers, AML pathogenesis requires constitutively activated signal transduction pathways. In AML, the most frequently mutated targets are FLT3, N-Ras, K-Ras, and Kit. Unique to AML, however, are mutations of myeloid transcription factors, including PU.1, C/EBPalpha, and AML1. Point mutations, truncations, and fusions of these genes have all been observed in patients and contribute to the dysregulation of white blood cells.

Morphologic Classes of Acute Myeloid Leukemia

- Acute myeloblastic leukemia with minimal differentiation (M0)
- Acute myeloblastic leukemia without maturation (M1)
- Acute myeloblastic leukemia without maturation (M2)
- Acute promyelocytic leukemia (M3)
- Acute myelomonocytic leukemia (M4)
- Acute myelomonocytic leukemia with abnormal eosinophils (M4Eo)
- Acute monocytic leukemia (M5)
- Erythroleukemia (M6)
- Acute megakaryocytic leukemia (M7)

RELATED PRODUCTS

Antibody Name		Catalog Number	Type	Applications
AML1	1	15494-1-AP	Rabbit Poly	ELISA, IHC, IP, WB
BAD	8	10435-1-AP	Rabbit Poly	ELISA, IHC, WB
C/EBPα/CEBPA	6	18311-1-AP	Rabbit Poly	ELISA, IP, WB
c-KIT		18696-1-AP	Rabbit Poly	ELISA, FC, IHC, WB
c-Myc	23	10828-1-AP	Rabbit Poly	ELISA, IF, IHC, IP, WB
CyclinA1	6	13295-1-AP	Rabbit Poly	ELISA, IHC, WB
ERK (MAPK1)	28	16443-1-AP	Rabbit Poly	ELISA, IF, IHC, WB
ERK (MAPK1)	2	51068-1-AP	Rabbit Poly	ELISA, IF, IHC, WB
GRB2	1	10254-2-AP	Rabbit Poly	ELISA, IF, IHC, WB
HRAS (RAS)	5	18295-1-AP	Rabbit Poly	ELISA, FC, IF, IHC, WB
JUP	1	11146-1-AP	Rabbit Poly	ELISA, IHC, WB
KRAS (2A-Specific)		16156-1-AP	Rabbit Poly	ELISA, FC, IF, IHC, WB
KRAS (2B-Specific)		16155-1-AP	Rabbit Poly	ELISA, FC, IF, IHC, WB
LEF1	2	14972-1-AP	Rabbit Poly	ELISA, IHC, IP, WB
MAP2K1 (MEK1/2)		51080-1-AP	Rabbit Poly	ELISA, IHC
NFkB	16	14220-1-AP	Rabbit Poly	ELISA, IF, IP, WB
NRAS	2	10724-1-AP	Rabbit Poly	ELISA, FC, IF, IHC, WB
PI3K		13229-1-AP	Rabbit Poly	ELISA, WB
PPARD	1	10156-1-AP	Rabbit Poly	ELISA, IHC, WB
RAF	1	51140-1-AP	Rabbit Poly	ELISA, IHC, WB
RARA		10331-1-AP	Rabbit Poly	ELISA, IHC, IP, WB
STAT3		51075-2-AP	Rabbit Poly	ELISA, IHC, WB

00 This number shows the amount of times our antibody has been cited in a publication.

Legend	
———	Association
———→	Directly Activates
- - - - - - →	Indirectly Activates
———⊣	Inhibits
+P	Phosphorylates

For more information or other pathways visit **ptglab.com**

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