Gene	Description	Role
CBL	Cbl proto-oncogene	It mediates the transfer of ubiquitin from ubiquitin-conjugating enzymes (E2) to specific substrates.
CBLB	Cbl proto-oncogene B	It is involved in EGFR ubiquitination and internalisation, and functionally coupled with the E2 ubiquitin-protein ligase UB2D3
CBLC	Cbl proto-oncogene C	It plays important roles in cell signalling through the ubiquitination and subsequent downregulation of tyrosine kinases.
EGF	Epidermal growth factor	It acts as a potent mitogenic factor that plays an important role in the growth, proliferation, and differentiation of numerous cell types.
EPGN	Epithelial mitogen	It is a ligand for the EGFR and plays a role in cell survival, proliferation, and migration.
ERBB2	Erb-B2 receptor tyrosine kinase 2	It binds tightly to other ligand-bound EGFR family members to form a heterodimer, stabilising ligand binding and enhancing kinase-mediated activation of downstream signalling pathways.
ERBB3	Erb-B2 receptor tyrosine kinase 3	It forms heterodimers with other EGFR family members that lead to the activation of pathways, which leads to cell proliferation or differentiation.
EREG	Epiregulin	It acts as a ligand of the EGFR and the structurally related ERBB4. Also, it promotes the progression of cancers of various human tissues.
ERRFI1	ERBB receptor feedback inhibitor 1	It acts as a negative regulator for several EGFR family members, including ERBB2, ERBB3, and ERBB4. It inhibits EGFR catalytic activity by interfering with its dimerisation.
GRB2	Growth factor receptor-bound protein 2	The protein encoded by this gene binds the EGFR and contains one SH2 domain and two SH3 domains.
IGKV1-33	Immunoglobulin kappa variable 1-33	It enables identical protein binding activity
IGKV1D-33	Immunoglobulin kappa variable 1D-33	It serves as receptors that trigger B lymphocytes' clonal expansion and differentiation into immunoglobulin-secreting plasma cells upon binding a specific antigen.
IGLL5	Immunoglobulin lambda-like polypeptide 5	This gene encodes one of the immunoglobulin lambda-like polypeptides-alternative splicing results in multiple transcript variants.
PTK2	Protein tyrosine kinase 2	Activation of this gene may be an important early step in cell growth and intracellular signal transduction pathways triggered in response to specific neural peptides or cell interactions with the extracellular matrix.
PTPN11	Protein tyrosine phosphatase nonreceptor type 11	PTP is widely expressed in most tissues and plays a regulatory role in various cell signaling events necessary for various cell functions, such as mitogenic activation, metabolic control, transcription regulation, and cell migration
SHC1	SHC adaptor protein 1	A signaling adapter that couples activated growth factor receptors to signal pathways It participates in a signaling cascade initiated by activated KIT and KITLG/SCF.
SOS1	SOS Ras/Rac guanine nucleotide exchange factor 1	It regulates RAS proteins by facilitating the exchange of GTP for GDP
SRC	SRC proto-oncogene, nonreceptor tyrosine kinase	It plays a role in the regulation of embryonic development and cell growth.
STAT3	Signal transducer and activator of transcription 3	It mediates the expression of various genes in response to cell stimuli and thus plays a key role in many cellular processes, such as cell growth and apoptosis

TGFA	Transforming growth factor alpha	It encodes a growth factor that is a ligand for the EGFR, which activates a signalling pathway for cell proliferation, differentiation, and development.